

CAAAGTCGGT TTAGTAACAT GTATGTATGT AAATAATGTA ACTGGACAAA TACAGCCTAT 420  
 TCCACAAATG GCTAAAGTTA TAAAAAATTA TCCTAAGGCA CATTTCATG TAGATGCGGT 480  
 5 TCAAGCATTG GGCAAAATTT CAATGGATCT CAATAACATA GATAGTATTA GTTTAAGTGG 540  
 ACACAAGTTT AATGGTTTAA AAGGACAAGG CGTCTTACTT GTAAATCACA TTCAAAATGT 600  
 TGAACCAACT GTCCATGGTG GTGGTCAAGA ATATGGTGTT AGAAGTGGAA CAGTTAATTT 660  
 10 GCCAAATGAT ATTGCAATGG TTAAAGCGAT GAAGATAGCT AATGAAAAT TTGAAGCATT 720  
 GAATGCATTT GTTACTGAGT TAAATAATGA CGTCCGTCAA TTTTAAATA AATATCATGG 780  
 AGTTTATATT AATTCTTCAA CTTCAGGTTT ACCATTCGTT TTAAATATTA GTTTTCCTGG 840  
 15 CGTAAAAGGT GAAGTATTAG TTAATGCTTT TTCAAAATAT GACATTATGA TATCTACGAC 900  
 AAGTGCTTGT TCATCTAAAC GTAATAAATT AAATGAAGTA TTGGCTGCAA TGGGATTATC 960  
 20 AGACAAATCT ATTGAAGGTA GTATAAGATT ATCATTTGGG GCTACTACAA CTAAAGAAGA 1020  
 TATAGCGAGG TTTAAAGAAA TATTTATCAT CATTTATGAG GAAATTAAGG AGTTGCTAAA 1080  
 ATAATGAAGT ATGATCACTT GCTTGTTAGA TACGGGGAGT TAACATTAAA GGGTTCAAAT 1140  
 25 AGAAAGAAAT TTGTAAATCA ATTAAGAAAT AATGTAAATA AGTCaTTAAA AGGACTTGAT 1200  
 GGGTTTGTGCG TTAAAGGCaA ACGAGATCGT ATGTATATTG AACTTGAAGA CCATGCaGAT 1260  
 ATAAATGAAA TAACATATCG ATTATCAAAA ATTTTCGGTA TTAAATCTAT TAGTCCAGTA 1320  
 30 TTAAAAGTAG AAAAAACAAT AGAGGCAATA AGTGCAGCGG CAATTAAATT gCGCAGaATT 1380  
 TGAAGaAAAC AGCACATTTA AAATTGATGT GAAGCGTGCC CGATTAAAAT TTCCCAATG 1440  
 35 GATACGGTAT GGAATTACAG CGTGGAATTG GGGTGGTGCC AGTATTGGAG CACTTCGCCA 1500  
 TATTTCCAGT GGATGTCCAA CGTCCCAGnC CCAGGAATT 1539

## (2) INFORMATION FOR SEQ ID NO: 563:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 968 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 563:

50 ATAnCGTATA CATGTGTTCT TTAAAATTGT GATAAGGAGT TTAGGATGGT TTATTTAAAA 60  
 TCAATAGATG CCATTGGATT TAAGTCTTTT GCAGATCAAA CCAATGTTCA ATTCGATAAA 120  
 GGTGTAACTG CAATTGTTGG TCCAAATGGA AGCGGTAAAA GTAATATTAC AGATGCTATT 180

55

ATCTTCTCAG GTGCAGAACA TCGCAAAGCT CAAAATTATG CTGAAGTACA GTTAAGATTA 300  
 GATAATCATT CTAAAAAGCT CAGTGTGGAT GAAAACGAAG TTATTGTAAC AAGAAGATTG 360  
 5 TATCGAAGTG GTGAAAGTGA GTACTACATA AATAATGACC GTGCAAGATT AAAAGATATT 420  
 GCCGATTTAT TTTTAGATTG TGGATTGGGA AAAGAAGCGT ATAGCATTaT CTCGCAAGGT 480  
 AGAGTTGATG AAATACTAAA TGCTAAACCA ATTGATAGAC GTCAAATTAT TGAAGAATCG 540  
 10 GCTGGTGTAC TTAAATATAA AAAACGTAAG GCTGAATCAT TAAATAAACT TGACCAAACA 600  
 GAAGATAATT TAACGAGAGT AGAAGACATT TTATATGATT TGGAAGGTCG CGTAGAACCT 660  
 CTAAAAGAGG AGGCAGCTAT AGCTAAAGAA TATAAGACAC TTTCACATCA AATGAAACAT 720  
 15 AGTGACATTG TAGTTACAGT sCACGATATT GATCAATATA CAAATGACAA TAGACAATTA 780  
 GATCAACGTT TAAATGATTT ACAAGGCCAA CAAGCAAATA AAGAAGCTGA CAAGCAACGT 840  
 20 TTAAGCCAAC AAATTCAACA ATATAAAGGT AACGTCATC AACTTGATAA TGATGTTGAA 900  
 TCgCTTAATT ATCAATTAGT AAAAGCTACG GAAGCCTTTG AAAAATATAC GGGACAATTA 960  
 AATGTTTT 968

(2) INFORMATION FOR SEQ ID NO: 564:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 564:

TTGTGTGTAT GCATTCAATG TGCTCTGTTT GTAAATGGCT AGCTATATAA TTTAgGATTG 60  
 GAGGATCGTC ATCGACAACA AGACATTGCA CCATAGCTAT AAACCTCCCTT ATCTTTTTTCA 120  
 40 TTTATTATAC ATGTAAAATA TTTTTGCGTA AAAAAACAAT TGTTCATATT GAGTTCATAT 180  
 TTCAACCTTA TACTGACGCT AAAGAAGAAA TAGGGAGAAG TGAATCGATA TGAAATTAGC 240  
 GATAAAAGAG ATTATGTTTT ACAAAATTCG TTATATTTTA ATCACATTAA TCATTCTTTT 300  
 45 ATTAAGTATT ATGGTGTTAT TTATTAGTGG TTTAGCTCAn GGGCTTGGTA GGGaGAATAT 360  
 TTCGTwATTT GAACACTTTG GATAATGATG aaTATGtTGT TCaAAAAATG AAAGAGCCGC 420  
 aaATTGaGAA ATCGCA 436

(2) INFORMATION FOR SEQ ID NO: 565:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2554 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 565:

	ATGTTTTGTC AATATCAATT GTTTGAGATA AATCCGCTTG TATAAACGA ACTTTATCAT	60
10	CATTAAATTT GCTAGTTAAT TCATTATAT CAGTACGATA ATATTGCACA TAAACTTCAA	120
	ATCCATCAGT TAATAATTGT TTGACTATCT CAGAACCAAT TGAACCAGAA CCACCTAATA	180
	CTAATGCTTT CATTACTTTT TAATCTCCAA ACGACTATCG ACTTGCTGAT CTAAATTTAA	240
15	ATATAACGAT GACGTTTCGT TAATACTATC TAACGTGATA TTTTCAACAA TGTCTAACAT	300
	GTCAAACACG CTAACACCTT CAAAATACAA TTTAGTATAT TGATTAGCAA TATATTTCAGG	360
	TGAGTTTAAA CTTGATATGA ATTCACCTAT AAATTGCTTT TTCAAAAGTT CAAATGCTTC	420
20	TGCATCTTGG AAATGTCCTT TTTTATCAG CAACTCATCT AATAATAATT TTTTAAATTT	480
	ATCTGGTTCT TCAGTAGCAC TTGTCACGAT TGAAAACTA TACGTCGGCT CTAGTACAAA	540
	TTGATAACCA AATGTATCAT CGATAAGTCC TTCGTTTAAAT AAATTCTGAT AAAAATCTGT	600
25	TTCTTCCCCA AAAATTAAC TAAAGAATAA TGACATTTCT AAATCACGTT GTACATATTT	660
	TTGAGGCGCT TCTTGTAATG GTTTATTTTT AAAACCAAGC ATTAGTCTTG GTGATTGAAT	720
30	TTTCATAGAT TCAGTAACAA ATGCTTCTTT AACATCCTCC GGTTCATCAA CAAGTCCTCG	780
	TTCGATTTTG GGTGGTTAA CTTTATTACG AGCATCCTCG TGTGTTTTTA CTATTCgACA	840
	TATTGCTTCA GGATCCACAT CGCCAACAAC AAATAAAACC ATATTGATG GATGATAAAA	900
35	CGTTTCATAA CATAGATACA AATCATCTTT TGTAATATCG TATATACTTT CTACACTACC	960
	GGCAATATCA ACACGTATTG GATGTTGTTG ATACATTGCA CGCAATGTAT TaaACATTAA	1020
	TTTATATCCA GGTGCTCTT GaTACATTTT TATTTCTTCT GCAATAATAC CTTTTCTTTT	1080
40	ATCAACAGTT TCTTTTGTA AATAAGGCGT TTCaACCATT GTAAGTAAAC GTTTAATGTT	1140
	GTTTTCAATA TtATCAGTTG CACTGAACAA GTAGCTTGTA CGATCAAAGC TTGtAAACGC	1200
45	ATTTGCTTGT GCGTTATCTT CAGCAAACGC AGTAAATAAG cTTCTTCTTC TTTTTCAAAT	1260
	AATTTATGTT CcTAAAAAGT GAGCAACTCC ATCAGGTACA GTAACAAATT GGTCTTGTC	1320
	AAGGGGTTTG AATTGATTAT CTAATGAACC AAATTGTGTA GTGTAAGTGA CAAATGTCTT	1380
50	TTGAAAACCT GGTTkGGGGA TAATAATAA TCGTAAACCA TTTTCTAATt CTTGTTCGAA	1440
	tACTCTTTTG TCTATTAATT CATAATAACG CTCTTTCATT ATTTATCCCC TCCTTTTGTC	1500
55	AACACATAGA TtGTATCTAA AAATGCTTTT TCAGCAACAG AAACAATATC TTCGCGACTT	1560

TTATGCATAA TCTCTATAAT ACTTTTCGGA CGATCTTCAG ATTCATATCG ATGAGAAATG 1680  
 ATTACTTTTT TAGCTAACTC TAATTTTTCT TCAGTGAAAT CTCCTGCTTT TATTTTTTCA 1740  
 5 AATTCACCTTA TAATAGTGTC TTTTGCAGTT TCGTACTTAT CACTTGAAAC CCCACTCAAA 1800  
 ACAATAAAT AGCCATTTTT GCCATCAATT TGTGAATGTA TAGAGTACGC TAAACTTTGC 1860  
 TTTTCTCGCA CTTCAATTAA TAAACAGAT GAAGGATCTC CTCCAAACAT CATGTTAAAT 1920  
 10 ACAACAAAGG CAGCATATCC ACTTTGTCCA TATTGTGTTG GAAAACGGTA TCCCATATTT 1980  
 AATTTAGCTT GATCCACGTC ATCATATTCA ACAATATAAT CAACTTCTTC ATCGTGTAAT 2040  
 15 TGATGAGTAG AATGTTGGAA TTGATGTTTA TCGAATGGTT TAAGTGCAA TTTTTCACGT 2100  
 ATTTGTTTCT CAACACTTTC AGGTTCTACA TTGCCGACAA CATAAACAGA ACATTGATCA 2160  
 TTATTAATCA TTGATTGATA TGTATGATAT AGTGTTCAG CAGTAATATG TGGGATTTGT 2220  
 20 TCTAGTTGTC CTGTAGATA GTATTTATAT GCTTCATTTT CAAACATATG GTCGAGTAAT 2280  
 TTTAAAACG AATATTGTGC TTTATTATCT ACCATTGCTT CTATTTTTTT GGCTAATAAT 2340  
 GTTTTCTCTT GGTTAACAAA ATTATCATTG AATGCTTTAT TTTCAATTAA TGGATTCCAA 2400  
 25 ATGATTTCTT GtAATAAATC TAATCCTTGa TTAAATAATG AwTCACCGkT TCyTAAATAA 2460  
 CGkkCaTTAA caATTyCTAA tGaAAATGtA ATgACaTGCT GaTCTTTGAA TTTTGAAATT 2520  
 30 GTACTATTCA CATACGCACC ATATAAATCG GCTA 2554

(2) INFORMATION FOR SEQ ID NO: 566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1424 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 566:

TnTCGCTATT TThAATTGGT TTTGTATGGT TTAAGTTATA TCAATATACA ACAnACCCTA 60  
 AAGCTGATAT CCCAGGTATC ATTTTtagTA CGATTGGTTT TGGTGCTTTG TTATATGGTT 120  
 45 TCTCAGAAGC TGGCAACAAA GGTTGGGGTT CAGTAGAGAT AGAAACAATG TTTGCGATTG 180  
 GTATTATCTT TATTATTCTA TTCGTTATTA GAGAATTAAG AATGAAATCA CCAATGTTGA 240  
 50 ATTTAGAAGT ATTGAAATTC CcAACATTTA CATTAAACAA AATTATTAAT ATGTTGTAA 300  
 TGTTAAGTTT ATATGGTGGT ATGATTTTAT TACCGATTTA TTTACAAAAT TTACGCGGAT 360  
 TcTCAGCATT AGATTCCGGA TTGTTATTAT TACCTGGTTC TCTAATTATG GGTCTACTAG 420



TTGCTGTAAT GACTTATGCA ACATGGGAAT TAACTAAATT AAATATGGAT ACACCATATA 540  
 TGACAATCAT GGGTATCTAT GTACTTCGTT CATTGGGTAT GGCATTTATA ATGATGCCAA 600  
 5 TGGTAACTGC AGCTATTAAT GCGTTACCGG GACGACTTGC CTCTCATGGT AATGCTTTCT 660  
 TAAATACGAT GCGTCAATTA GCAGGCTCTA TAGGTACAGC AATCTTAGTT ACTGTAATGA 720  
 CAACACAAAC TACACAACAC TTATCAGCTT TTGGGGAAGA GTTAGATAAA ACGAATCCTG 780  
 10 TTGTACAAGA TCATATGCGT GAATTAGCAT CACAATATGG CGGACAAGAA GGCACAATGA 840  
 AAGTGTACT ACAATTTGTA AATAAACTAG CAACGGTTGA AGGTATTAAT GATGCATTTA 900  
 15 TAGTTGCAAC GATATTTAGC ATCATCGCCT TAATTTTATG TTTATTTTAA CAAAGTAATA 960  
 AAAAAGCAA AGCTACAGCT CAAAAGTTAG ATGCAGATAA TAGTATCAAT CATGAATAAA 1020  
 TAAAATAAAT TAATTGAAGT GTGACTAATC AAAAATTATG TTGTGGGGAC ATGATTTTAA 1080  
 20 AAGTATCGGT GCCAAATATG GTTATCGATA CTTTTTTTAT TTGTTGATTT ATAGAATGTT 1140  
 AGAGGAATTA TATTAAAATT TGGCATTGAC GTAGTAGGTC ATTAATAAAG AAAAAGCAGG 1200  
 AAGTGGGTCA ACGAAATGAA TTTTGTGAAA ATAACATTTC TGTCCCAATC CCTACTATAT 1260  
 25 AACATTATTT TAAACGAGGC ATGCGATTAC GGAAGAATAA GCTTATAACA AGTAAACCGA 1320  
 TGCTACAGCC AAGTAAAATG ATGCCGTTAT GAATAGCGTC ACTTgCTGTA ATCACTTGAT 1380  
 30 CTGGTGGTAC ATTTAAATAA TATTTTTTGA AAACATCTGC AATT 1424

(2) INFORMATION FOR SEQ ID NO: 567:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 676 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 567:

TCTCCCATGT TCTGCTAAAT GACGCATCAC TTTTACTTCA TGAGGCGTCA ATACACGTCC 60  
 45 TTCACCAGCA TTCAAACCGA CAACATTTAA AGGCCCATAT TCAATACGAG ACAGTTTCGT 120  
 CACTTGATGA CCAAAATGTT CGAACATTCT TCTGACTTGG CGATTACGAC CTTCTGTAAT 180  
 TGTAATTCA ACCAATGTTG TGTTTTTATC TTTATCTTGT TTCTTAACTT TCACTTCAGC 240  
 50 CGGTTGCGTC ATACCATCTT CTAATCAAT ACCTTTTTCT AGCGCTTTCA CTTCTTCTCT 300  
 CATTAAATAA CCTTTTAATT TCGCAACATA TTTTTCTTA ATTTGATATC TTGGATGTGT 360  
 55 CATTAAATTA GTAAATTCAC CATCATTTGT GAGTAATAAC AATCCAGAAG TATCATAGTC 420

ACGTCCTCTA TCATCAGATA CACTTGtKAT CACTTGAGTT GGkTTATGGA AkAAAAATGKa 540  
 AAAtTTTGTCT TCTAGTTCTA TTTTAATACC TTCAACTTCA ATCGTATCTG ATGGCTTCAC 600  
 5 TTTTGTTCCT AATTCAGTGA CAGTCGTACC ATTCACTTTC ACTTTTCCTT CAGAAATTAA 660  
 AGTTTCTGCC TTACGT 676

## (2) INFORMATION FOR SEQ ID NO: 568:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 568:

GAAACGGTTC TACCAAAAAA CAGTAAGGGC TAAACCCAAT CATGGTAAGA CAAAAAGTAC 60  
 AAATAGCCAT GCCCAAGTTG AACTCGCTGT ACGCCTATTT CTTTCTAAAA AGATAATAAT 120  
 AAAAGCCAAT ACTAAATTAA TGATGAATCC AATGGCTAAA ATAATAGTAA ATAACGTTCC 180  
 25 TAAATCGTTT GAAAATGTAA ATCGCATAGT CTTTCTCCT ATAAAGAAAG GCACAAAAAA 240  
 ACATTTTGCA CCTTTCACGT CATATTATTT ATTCACAGAT AAAGTTAAAA TTGcATTGAA 300  
 TTCTTCTTCA TTATTGGGA ATGTTCTTTC TTCTATTTCT TTAATAGTAA TATTTACTAA 360  
 30 TTTTAAATTT GTAGCTTCTT CAGAACTTAA AAAAGCATTAA ATGTTTTTTT CTAATAACTC 420  
 KAAAGTCTCA GCTGtAAAAg TTTTAAGTTT AATT 454

## (2) INFORMATION FOR SEQ ID NO: 569:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 894 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 569:

ACGATATTAC CACCCTCTGA AATAACATCA ATCATGTGAT CTGTAAAGTC CCAAGGATGA 60  
 CTTGTTGTGA AACGAACTCT TGGAAATCGCT ATTTTAGAAA TTGCTTGTA AAGATCTCCT 120  
 50 AAGTCATATT CTATATCCTG TAAATCTTTA CCATAAGAAT TTACATTTTG ACCTAAAAGC 180  
 GTTATTTCTT TGTAACCTTC ACGAGCAAGT TCACGTACTT CATCTATAAT GTCTTCAGGT 240  
 CTACGGCTTC GTTCTTTACC TCTTGTAAT GGAACAATAC AATATGTACA AAACCTATCA 300

TCAATAACGT CTCCTTCTTT AGACCATACT TCAACAACCA TTGCTTTAGA TAAGTATGCT 420  
 TCTTCTAAAA TTTCTGGTAA ATGATGAATA TTATGTGTAC CAAATATCAT ATCTACATT 480  
 5 TGATACGATT TTAAAAATTTT ATTCACTACT GACTCTTCTT GTGACATACA ACCACAAACA 540  
 CCGATTAAAA TATCAGGTCG TTCTTTTTTC AAATrCTTCA AATTACCTAT TTTACTAAAC 600  
 ACTTTGTTCT CGGCATTTTC TCTAATCGCA CATGTATTAA TTAAAATAAC ATCTGCAGTG 660  
 10 TTAATATCAG TCGTKGCTTG aTAGCCTAAT GCyTcmAGTA TACCAGCAAT GACCTCAGTG 720  
 TCAATGTGCAT TCATTTGACA TCCATATGTT TTAATTAAAA ATGTACGCTC GTTCCCCATA 780  
 15 CCGCGATATT TTyCATCAAT TtGGgAAATC nCTATTATAA CGAACTTCTk GTtTACCnCC 840  
 TTTTTnCGC TCCTTTAAAA TTAAGGCGGC TGATAACAG GTCCAAAATA TTAC 894

(2) INFORMATION FOR SEQ ID NO: 570:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 570:

30 TATCAATCCC ACAGCACATG CTGAACAAGA TCAAACATGG GAGAAGATTA AAGAACGCGG 60  
 TGAACCTAGA GTGGGTCTTT CTGCAGATTA TGCACCAATG GAATTTGAGC ATACAGTTAA 120  
 TGGTAAGACT GAGTATGCAG GTGTAGATAT TGATTTAGCT AAAAAAATTG CGAAAGATAA 180  
 35 TAATTTAAAA TTAAAAATCG TCAATATGTC ATTTGATAGT TTGTTAGGAG CTCTTAAAC 240  
 TGGAAAAATT GATATTATTA TTTCCGGAAT GACTTCAACG CCTGAACGTA AGAAGCAAGT 300  
 TGATTTTTCa GATTCATATA TGATGACTAA AAATATCATG CTTGTAAAGA AAGATAAAGT 360  
 40 TAATGAATAT AAAGATATCm AAGACTTTAA TAATAAAanA GTnGGGGCAC AAAGGGACTG 420  
 AACCAGAAAA AATCGCTCAA C 441

(2) INFORMATION FOR SEQ ID NO: 571:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1205 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 571:

AAGTCGTTCA TCTTTTTCTA CAAGGGTGTA AAAATAATCA ATCATATCGT ATAACGCTTC 120  
 TTTACCAATG ATGTCATATG GTGTTGTTGT CATTTAATCA CCCATTTTCA AAAATTTACT 180  
 5 GTTACGAACT TAAGTTAATA TATAACTAAT ATAACATGAT TTTAAACATT TGAAAGAAAT 240  
 ATGCATATTT GCCAATTTAA TTTATATTGT TTGAAAGTGT TTCTTTTTTC TTGAAAAAAC 300  
 GTTGAACTTT ATTTAAAGGT tGATGATGTT CGAGGTTTAG TTCGTTtAAT AAAGATtGGA 360  
 10 ACTTTTGTA ACCTTGATTA TAGTCTTTAA CTTCGAACTC TAACTCATAA TCCGTAGTAT 420  
 CGAAATACTC ACTTTTATCT AAAACCAGTA AATCACCTTT ATATTTAGTT TCTTGCGGAT 480  
 ATGTCGTTAA TGCACCAAGT ATTGATAAAG TTGTATCTTT TACACCAAAC TGTTCAACTA 540  
 TAATTTGACG AATGTCATCT GGAAGATTGT CGTTTGAAAT AATCAAGTTC ATCTCTGGTT 600  
 TAATGTCGAC GATATAGTTG TATTCTAATA GACCAACCTT TGCTGGTGTC TTTAAAGTCA 660  
 20 TTTTCATATTG ATTGTCTTTA ACTCTTATGC GTAGTGCAGA GCGATGTTCC TTTAATTTGA 720  
 AATCGGGTGT ATCAATATAG TAATTGACTT GCTTAmAAAG CACACTGTCT TTAAATATT 780  
 TCTCTTGCAA TTTATTATAG ATTGAtGCAG TTATCATTTG TtTAAATTCT AttTCATGAT 840  
 25 TTGTTGCCAT GATATGTATA CACCTCGTAT CAAATTCAAT TTATCTTAAC TATATTATGA 900  
 ATGACAAAGT TGAATTTTAA AAGTAATTTT CTTTATCTAT TATCAATGTT AATTTGACCA 960  
 TTAAAAATAG TGTTTCGTAAG TGTTTTGTAT TATTGaATTG TGTTAAAATG TTATGGAATA 1020  
 30 AGAGGAGGAT TAAGCATGsG TTTWTATATT AATGAAATTA AAATTAAAGA TGACATACTT 1080  
 TATTGTTATA CAGAAGATTC TATTAAAGGA TTATCTGAAG TAGGACAAAT GCTCGTTGAT 1140  
 35 AGTGATAATT ATGCCTTTGC GTATACATTA GATGATGGTA AAGCGTATGC TTATCTCATT 1200  
 TTCGT 1205

## (2) INFORMATION FOR SEQ ID NO: 572:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 572:

50 TGAAGAAATA GCAATGATGA AATGCCGTAT GTTATATGAG ACGGGGTCAT TTCTTGAATT 60  
 AAGAGAAGAA ACAATTGTCT TATTGAAAAC TGGCATACAA CAATATGATG CATTGATGAT 120  
 TTATTACGTG AAAAGTTTGA TTGGTTTGGG ACAATATTTT GAAGCGGTAG AAGTAATTCA 180  
 55

ATTTGCTAAG TCAAAATTAA TTGAAGATGA AAAACGATTG ACTCAGTCAT TAGCTGATTT 300  
 TGtTACGTTA TCAATGAGGG AACAGACGCA CTTGATTTTG AAGTTAATAG ACAATGGTCA 360  
 5 TTTTCAATTT CAAGAAACGG TATTATATAT ATkAAaAyCT AATaCGTACa GTtATAACCT 420  
 CATTAGTTTA ATGATTGAGT ATTTAAGGTT CGCAAATTGT ACACAAGAAC TGACAATTGA 480  
 10 AAAGTATGGT ATGGATGTAA CTTTTGTACC AGCTAATTTA AAAGGGCTAG AACATACAAC 540  
 ACTTAAAGAA AAAGTTATAC CTAACGTTAT 570

## (2) INFORMATION FOR SEQ ID NO: 573:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 939 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 573:

25 GTTGAATGGT TAGCAGCTGC AGTTGTATTA TATTTCTGTG GTGTAATTGT TGACGCTCAT 60  
 GTATCATTCA TGTCCTTTAT TGCAATATTT ATCATTGCTG CATTATCAGG TTTAGTCAGC 120  
 TTTATTCTCTG GTGGTTTCGG CGCTTTTCGAT TTAGTTGTAT TACTAGGATT TAAAACTTTA 180  
 30 GGTGTCCCTG AGGAAAAAGT ATTATTAATG CTACTTCTAT ATCGTTTTGC GTACTATTTT 240  
 GTACCGGTAA TTATTGCATT AATTTTATCA TCATTGAAT TTGGTACATC AGCTAAGAAG 300  
 TACATTGAGG GATCTAAATA CTTTATTCTT GCTAAAGATG TTACGTCATT TTTAATGTCT 360  
 35 TATCAAAAGG ATATTATTGC TAAAATTCCA TCATTATCAT TAGCAATTTT AGTATTCTTT 420  
 ACAAGTATGA TCTTTTTTGT AAATAACTTA ACGATTGtKt ACGATGCTTT tATATGATGG 480  
 AAATCACTTA ACGTATTATA TTCTATtGGC AATTCATACT AGTGCTTGTT TATTACTTTT 540  
 40 ACTGAATGTA GTTGGTATTT ATAAGCAAAG TAGACGTGCC ATTATCTTTG CTATGATTTT 600  
 AATTTTATTA ATCACAGTGG CGACATTCTT CACTTACGCT TCATATATTT TAATAACATG 660  
 45 GTTAGCTATT ATTTTTGTTC TGCTTATTGT AGCTTTCCGT AGAGCGAATA GGTTGAAACG 720  
 CCCAGTAAGA ATGAGAAATA TAGTTGCAAT GCTTTTATTC AGTTTATTTA TTTTATATGT 780  
 TAACCATATA TTTaTTGCTG GAACGTTATA TGCATTAGAT ATTTATACGA TTGAAATGCA 840  
 50 TACATCTGTA TTGCGCTATT ACTTCTGGCT TACGATTTTA ATCATCGCTA TCATCATAGG 900  
 TATGATTGCA TGGTTGTTTG ATTATCAATT TAGCAAAGT 939

## (2) INFORMATION FOR SEQ ID NO: 574:

(A) LENGTH: 1059 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 574:

10	GAATTAATTA AATATTACAC ACAGCCTCAT TTTTCATTTT CAAATAAATG GCTATATCAA	60
	TATGATAATG GAAACATTTA TGTGAACTT AnGAGATATT CATGGTCAGC ACATATATCT	120
	TTATGGGGCG CTGAAAGTyG GGGAAATATT AATCAGTTAA AAGATCGTTA CGTAGATGTG	180
15	TTTGGACTION AAGACAAAGA TACTGATCAG TTATGGTGGT CTTATAGAGA GACATTTACA	240
	GGTGGCGTTA CACCAGCCGC AAAACCTTCT GATAAACTT ATAATCTTTT TGTGCAATAC	300
	AAAGATAAAC TACAAACGAT TATTGGTGCG CATAAAATAT ACCAAGGCAA TAAACCAGTA	360
20	TTAACATTGA AAGAAATCGA TTTCCGTGCA CGAGAAGCGT TAATAAAAAA TAAAATATTA	420
	TATAACGAAA ATCGTAATAA AGGTAAGCTT AAGATCACCG GTGGCGGTAA TAACTACACT	480
	ATTGATTTAA GCAAAAGATT ACATTCAGAT CTAGCAAATG TTTATGTTAA AAATCCTAAT	540
25	AAAATAACTG TTGACGTCCT CTTTGATTAG TATATGAAGG TGACTTATAC TTCATGCACT	600
	TTAATTCCAA ATCAGATTAT TTAAATGATA ATTTTTAAAG TGTATGATGT ATATAATAGG	660
30	TAAAATTTTC TATATATTTA AATGGAATTG GGAGTAGGAA TGTGACAGAA ATAGTATTTT	720
	ATAAAATTTA TTCtTGTCAC TCCCCAACTT GCACATTATT GTAAGCTGAC TTTCCGCCAG	780
	CTTCTATGTT GGGGCCCCGC CAACTTGCAT TGTCTGTAGA aTTTCTTTTT GAAATTCTCT	840
35	ATGTTGGGGC CCCGCCTATA ATTGAAAAAT GCTTGTTACA TGGGCATTTT CATTCGGTCA	900
	ACTACTACCA ATATAATATT GtAGaGCCTA AGACATTGAT TTATTATGTC TTAGGCTCTA	960
	TTCTTCATT TAATGATTAA nTTATTATAG CAATACTTTA TTGTCCCATG ATTAGTGTTT	1020
40	TTTTAATGAG ACATAGTAAC TATAAAGTTT AATAATCGT	1059

(2) INFORMATION FOR SEQ ID NO: 575:

45

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 575:

55

GTTTGCTTTA GGTCTGTTT CATATTTATA CTTCAAGGA TTTACCTTTT TGaAGTCTGG 60

TTCAACTkGC TTTTATTCT TTTGAAATC AGCTGGTTGA GTAGTTATGA GTTCATTATT 180  
 TTTATTAGmA TAAATCTTAC CATTAAACATA TTTATAATCT TTTGTTATAA AGTCACCATT 240  
 5 TCTGAATGGA ACTACTTGAT TATGACCTTT AGAGAATAAA TCAGTACCGA ACATTAAATA 300  
 GTTCTTCGTA TCTATACCAG CCAAATGTAA AATTGTTGGC ATTACATCGA CTTGACCAGC 360  
 10 ATATTCATTA TTGATACCAC CAGATTTACC AGGGATTTTA ATCCAGAAAC CAGTTCTGTT 420  
 TAAATCTGTA AATTTAGCCG GTGTGATTTT TTCACCTAAT AGTTTTTCCA TGGCATTGTT 480  
 ATGGTTTTCA GAGATACCAT AGTGGTCACC ATAAATCATA ATCACTGAAT TGTCATATAA 540  
 15 TCCTTTTTTC TTCAAGTCAT TAATATATTC TTCT 574

## (2) INFORMATION FOR SEQ ID NO: 576:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 796 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 576:

CAATGTTTTA TAGTACAATA TATTTTnAAT AATACTCGTT AAGGAGAATG ATATGATATC 60  
 30 AATTCACGCA ATTTGACAG GAAAAATCCA AGATTTCCT TATAGCTCGA AAAGACCGAT 120  
 GCGCTCTGCT TTAGATAAAA CTAAGATTTT ACAACAACA TGGTTATCTT CAACTGGTTT 180  
 CACTGGTGAT GAACAGGCTT ATAAAGATCA TGGTGGACCA CATAAAGCAG TTTGTGGGTT 240  
 35 TAGTAAGCAT AATTATGCAC TGTATCAAGA TGATTACCT ACACTACCTA CTCATGCGAT 300  
 GTTTGGAGAG AATTAAACAT TTGATTATTT AGACGAATCT GATGTTTACT TTGGTAATCA 360  
 ATATCGTTTA GGTGAAGCGT TAATTGAGGT TTCTGAAATT AGAGAACCAT ACTGGAAAAT 420  
 40 TCAAGCAAAA TATAATATTC CTGATTAGT GAAGCGCATG TCTACATCTG GTAAAACAGG 480  
 TTTCTATTTT CGGGTATTAA AACAAGGCTA TGTATCTCCA AATGATCAGC TTTACTTAAT 540  
 ACAAGAAGCA CCAATCGAAC ATCGTTTATC TGTACAACAG CTTAATGACC TTTATTATAA 600  
 45 TGATAGACAA AATCAAGaTA TGTTACGATA TGCATAAAC AATCCATTTT TGTCACCAAC 660  
 AAGACGCGAT AAACCTCAAA AAATGTATAA CAGAACATTG GAAATAATTA CCTTTCATTh 720  
 50 ATAAGTGTTA AATGAACTTT TCAAAACaNa AAGGAATCAA CTTACACAT CGTTTGTATG 780  
 AATAGTCTTA TCTATA 796

## (2) INFORMATION FOR SEQ ID NO: 577:

(A) LENGTH: 1095 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 577:

10 AGAAATTATG ACAAATATA AAGATGGAAG GTTAGTTTAT GCATCAGTCG AACCAGGATC 60  
 TTACGTAATA CATAAAGATG ATGCAATTAA ATATGACGAT TATTCTAAGT TAAAAAATT 120  
 AAGTCAGCTA ACTAACTTG ATCATCCAAA ACCAGTTCCA TATAGCGTAc TCAAATCAAA 180  
 15 TCTTTCGGAG TACCTTTAAC AAGCGTTTCA TTTATGACAC ATGGATCAAA GGATACTAAA 240  
 GATGAAGTGT TGCCGGCATT GGCCTATTTT ACTTTTTCAC CAAAAAATTA TGAAGACAAG 300  
 TCTAATCCAG ATCCAAAAGT TTTAAATTTA GTACATATGG ATTTCTTAAA TGCATCTAGT 360  
 20 GATTTTGGTA ACGCACATTT TGTGTGTTTA AGTAAATATA TTAAAGAGTA TGAATCAAAC 420  
 TATGAAACAG CGTCAGATGA TTCTTTAAAA TAGTATTTAC TGTGTGAAAA ATAAATAGTG 480  
 TACTACATTA AATAATCGCA ATAATAATCC CGATAAACAA TCAGCATTAC TGCTTATCAC 540  
 25 ATAGAGTTCG TAATAACTAT AACTCTATGA TTCGCAAATA ATAAATGATT GTCATCGGGA 600  
 TTTATTTTTTA TCAATTTATA AAGTGACATT ACCTTGTTCA TCAGCAGGTT TGAAAACAGT 660  
 30 AATCACTGCA CTAATAATTG CTAAATGTG TGGGATACCT GTCCAACAGA ATATTAAGTG 720  
 TAGAATACCT TGCATATTCT TGCCGGCATA AAATTTATGA ATACCAAAC TACCTAAGAA 780  
 CAATGCTAAT AAAATATAAA TAACTTTGTT TACTTGCAAT TCTTTCCCTC CAGTTGAATT 840  
 35 GCTTATAATG ACATTAGCTT CTCTTTTTAT TATACCCACT TTTAGTTCAA ACATTCTAGT 900  
 TTAAGCATTC CCAATCATCT AAATTTTCAGT TATTCAATCC TTACAATAAA TTTAGGATTA 960  
 CATTTTCAGT GCATTGTATT ATTTTACGTG TGAAATATAC GTAATGAATC ACATGACAAY 1020  
 40 CTYCAAATTG AAAAATATAC ATTCTATGAT GTAAGGTCGC ATTTTTAATA TATTTACGTn 1080  
 AAAATAGTTT GGATG 1095

45

## (2) INFORMATION FOR SEQ ID NO: 578:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 489 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 578:

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ACTGCCAAAA TAATCATAGC CATGTTCTAC AGCTGCTTTC GCTACAATAT CCAAACGCAT 120  
 TTCAAAACAA GCGGTACAAC GTAAGCCGCC TTCTTTTTC TCAGCTAATT CTTTATCCTT 180  
 5 CACCATTTTC ACAAATTAT GTGGTTCATA AGGTGCTTCA ATATACTTCA CATTTCGCACC 240  
 AGTCTTGCGA TTAAAATCTT CCACAAATTG TTCTTGCACT TTAGCACGTC GTAAGTACTC 300  
 10 ATTTTTCGGA TGAATATTTG AATTCGCGAA ATAAATTGCA ATGTCTGCAT ATTGTGTAA 360  
 AAACCTAAT GTATATGTAC TACAAGGTGC ACAACAATA TGCAATAAGa TTTTAGGTCT 420  
 GATTGCTTCT CTTTCCCACT GsCCGATTAA ThTCTTCAAC ACCTTGTTCA TAATTAATTT 480  
 15 GTnGATTTh 489

## (2) INFORMATION FOR SEQ ID NO: 579:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 1287 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 579:

CGTACTGCAT CATTTGTTGA AAAATTTGCA AACTTCTTCA AGATGTTATG GCTTAGACTT 60  
 30 AAAGCGATGA AGCACTACAA AGCCTTAAAT AAAGAATCTA AGAAGCAAGA ATTTGAAAAT 120  
 TCATTCAAAG ATGTTCAAAA AATTATGCGT ATTGTGAATC ACAATATTAT TTTACGCTTA 180  
 AAAGAAGAAC AAAATAGTAC AAATGTACTT GAGGTTAGCT TAGTCATTAA TCATTACTAT 240  
 35 GATATGAGTC GCTCATTAAA GTGGCGTGCA CAACGTCGAA AAGAACGTCA AGAAAACAGC 300  
 AATCAAATCA TACCGCAAGC TATGTTCCAT AACCACAAAT TGGAAGCATT GTACTTACAA 360  
 CGTCATCTTT TAGATGAATT AATTCGCAA AATAAAATCA ACAATATCGT TGCAGCTCAA 420  
 40 ATTCGAGAAA ATATCAATTa CAACGAAATT GTCTTGCTTT TACAGTCCAA ACATTaAGCA 480  
 AGaCwTaCaw TmCCCCCGTA CATATGAGAC AAAGTCATTA TCATCTCATA TGTACGGGGT 540  
 TTTTATATTC AACATCAAAA AATCAGATTG ATGAAAAGTA AATAACCTTT CATCAATCCG 600  
 45 ATTTGATTAT AGAATCTATT TTTAAGTTT AAATGGAATT GTACATACGT TAACATTCTT 660  
 TTGATAAATT AAATACAATT TCATACGCAA ACTAGTTTGA TTGTGTAATA AATTATGCCA 720  
 50 ACGTTTCTTA GTAATAAATT CTGGTATCAC TACTGTAATC ATATAGTTTT GATCGTTGGC 780  
 TTTACGATTA ATCTTATCGA TAAAACGTGA AATTGGTCGT ATAATACTGC GATATTCCGA 840  
 ATGTAAAATA ACTAATCTTA CATCTGGGAA ATGACGTTTC CATTTCTCTT GGAATGCTTT 900  
 55

TCGTAATAA ATAGACTTAT CAACTGCTGT TGTAATACTT GTTATCGGCA CAATTGCTAA 1020  
 ATTACGATCT ACCACGTCCA CATTAGAAGC ATCAATGTCA GAACGTAATT GTTCTGCGAT 1080  
 5 ATCTCGATAA TGKTTGKTAA TTTTCAAGAA GAAATCACC ACGAACGGCA AGAAAATAAG 1140  
 TATCGGCCAT ACTTGGCTAA ATTTAGTTAT GAGTAAATC cATAAnAACA ATAAATGTCA 1200  
 CGATACCACC AAGTAAGTTC ACAGACAACT TACTTAACCA ATTCTTAGGA CGTTCATGAA 1260  
 10 TCCATTTAAT AACCATACCG AATTGTG 1287

(2) INFORMATION FOR SEQ ID NO: 580:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 580:

GCCTCCTTTC CTATATCCAT GGGTGTCTTA GTTGGAATG GCTTATTCCC TATCCCAAAC 60  
 25 ATCTGTCAAT TCAAGACTAT CACTGTATAC TAAATCGCCT nTCTATACnT CCATnCATTT 120  
 CATTTTCCAG TTGGAACAAT TTGTTTAATT ATTTTAAATA TCATTATCAA TCCAGAAGTA 180  
 TTTACTATTC ACTTTTAAcAA TAATCAATCA TTAACTACA CATGGGTAGT CGGTGGTTTG 240  
 30 CTTGGGGTTA GCTTTTAAAC TGGCAATTTA TTGTTATTGC CAAAATTAGG TGCAACATTA 300  
 ACTGTAATTG CAACAGTTGC GGGTCAAATT ATTATGGGTG TCATTATTGA TACATTTGGA 360  
 35 TTATTTGGCG CTACAATTCA TGATTTTAAT TTAATTAAAG CAATTGGAGT ATTGTTACTC 420  
 ATTGTCGGCA TCGTCATAAT GAATCAATTT AACAAGAATA ATTTATTACT AACTGATCAA 480  
 AAGTATTTAC TGTTTGGCT TCTATTAGGA TTTATTTTGT GTTCTTTCC ACCTATTCAA 540  
 40 ACGACAATTA ATAGTGCTTT AGCTAGTCAT ACTCATTCAC CAGCCTTTGC ATCATTAGTA 600  
 TCATTTACAA TTGGGTCAAT AGCGCTATTG ATTTAAACCG CTATTTTAA TCGTTCTTTA 660  
 AAATAAAAA CAAGTCATTT AAAATTCGGT AAATTAAAGC CTATCTATTT TACTGGCGGT 720  
 45 ATACTTGGCA TGGCTTTTGT AACAGCTAAC ATTATCTTAA TGCCTCATAT GGGTGCAGCA 780  
 TTAACAACAC TTATTGGGAT GTTGGCCAG ATTCTAATGG GCATATTGAT AGATCACTTT 840  
 GGATTATTTG GTTCACCTAA AATAGCAATG ACATCCAGAA AAATATTGG TCTATTATGT 900  
 50 ATTTTGACAG GCATTATACT TTTAAGATTA TTTTAAATTA ACTTTTAGCT TATCATTTTA 960  
 ACTTGTAATT ATTTTAAAAA GTGATAAGCT ATTTTGTGT GGTCTAAAAA TCTTTAGAAA 1020

CAACTCATTCTTAAGACCTA AATTAATGTT ATnTTTTTAAT AATTTACACC AAATTAATAG 1140  
 CAAAAATTAT GTTATTCGTG CTAATATTTT ATAGTTGGTT ATTCAATTAA TTAAAAATAA 1200  
 5 GTCAAAATGC ACAACTTTTT ATn 1223

## (2) INFORMATION FOR SEQ ID NO: 581:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 581:

CACCTTTTTA TCATGCTTAG TTATCAATAA ATCTATATTT TGCTGTTTTA CAATTTTTTTT 60  
 20 AACTTTATCA ATCTCATTAT CTTGGACTAA ATAAATATAT GATCTTGCAT CTGTTGCTAG 120  
 AGCTTGTTCTG TGTTTTTCTG ATAAACATA TGTGATGGAA GCGTGAATAA TAATGCCTAA 180  
 TGTAAACAAA CTGATAATTA ATATACTGCT TATCAATAAC ATTAAGCGGT GGTGAAACTT 240  
 25 CATCATTGTT CTTTAGGTCT TTCCAATTTA TAGCCTAAGC CACGCACAGT TTTAATAAGT 300  
 TGTGGCTTCT TAGGATTATC TTCTAATTTA TCTCTTAAAT GACTGATATG TACATCAACA 360  
 ATTCTTGAGT CTCCTGCAAA TTCATAATTC CATACCGTAT TTAACATATG CTCTCTCGTA 420  
 30 ATGACTCTGC CTGTCTTTC TATCAAATAA AGCA 454

## (2) INFORMATION FOR SEQ ID NO: 582:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 582:

TTTATAAGAT TTTATTTACA AATAATTGGT TTTCATATGT ATAAACACTT TTGACTTTTCA 60  
 45 AATCTTAAACG ATAATTCTAT TACAATACAA TCCCCTATTA GAATGATTTA TGTAATAAAA 120  
 AAAGCGGAGT TTCCCCCAGC TTTTCTAAAC GACTACATAA AATATAAGAT TGCAATTAAA 180  
 TGCAATAGTG ATGCTATTAC AATAAAAATA TGCCAAATCA TATGAAAATA TGGTCTATTC 240  
 50 TTTTGTGCAT AAAACCATGC ACCAATTGTA TAAGACACAC CACCTAAGAA AATGAATAAT 300  
 ATGAATATCC ATGATGTGCG AATAAAAATA ATTGGTAACA AGATAATACC TACCCAGCCC 360

AAAATCCCCC AAAGTGTCTG TCCCCATAAT AA

452

(2) INFORMATION FOR SEQ ID NO: 583:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 583:

CGCTTTTTCG	AATAAGTCAT	TAGCCGCTTT	TAAGCCTTCT	TCTTTTCGAT	CTACAACAAG	60
TAAAATAAAT	GGCTTTAACG	CTTCTTCTTT	TTCACCTTCA	AGCATATCTG	GTTTTTGAAC	120
CATTTCAAAT	GGAGATTTCA	ATCCATTATT	ATCGCTCATT	TCAATAATTG	CATCATACTG	180
TGCTTGTGAC	ATACTTGCAA	TAGCCTGTTT	TGCATTTTCT	TGAAGGAAAT	ATAAGTTTTT	240
CAATTTAGGA	TGCTTATTTA	ATGTACTTAA	TGTAATCGGT	GTAATGTCTT	TCTCATAAGA	300
CACTTCAATC	ACTGTACTAT	TTGTTCTACC	AGGAATTGGT	GGTTTTTCAT	GAATATGCTT	360
TGATACTTCT	CCAATTCCAA	CGACAGATTG	ATTTTTCGTT	CGATTATAAA	AAATAATATT	420
GTCGCCTTCT	TCTAACTGAG	TATAAAAATG	ATAACCATTA	CGTTTAATAC	CGTTGTACGT	480
GTGCGTATAA	ATCGTATATT	GGTTTCCAGG	TTCAAATTCT	TCAGTTTCAG	CTAAAAAGAA	540
ATAACGCGGT	ATCTTAATTT	CGCCTTTACC	AAGACCACTT	ATTAAATCAA	ACTCTTCTGC	600
AGTGATTTGA	TTGAACAATG	TCTCTTTCAT	ATnACTTATA	CGAAATTCCA	AAGCTTCACT	660
ACGCTTTAAA	TAATCTGCTG	TTAATGGTTT	CAATTGTTCA	TTAAAACGAA	ACTGTACACG	720
TATTTTATTT	TGTGCACCTG	TTTCAACACT	AATAATTTCA	CCACATCCAA	GTAGTCCAGT	780
ATCCGTCTGA	ACTTGATAAA	AGATGACTTG	ATCTCCTACT	TTAGCCTTTT	TAAACGCTCT	840
AAATCCTTGA	GATGGGTAA	AATGTGCGCC	TGATTCAAAT	AAAGCTGTTT	GTCCTACTAA	900
CGGTTCAATTA	TGATTCCAAC	GGTTATATCC	ACAATTCAAC	CAAAAATAAT	TCGTTTCTGC	960
TGTCATCTTA	ATACTCCTTA	ACCTGAATAA	ATTTTAGAAA	CACTATGAAT	TACATTCTTT	1020
tAGTGTTTCT	TATGCAGTTG	GACGCGTATG	CGAACAACTG	TATACCCTTT	GTTCACTGCG	1080
ATTTTAATCG	CATTTTCTAT	AACATTGTAG	CGCCCAGGAC	ATTAATTTAC	GTCCCAGACC	1140
CTTATCGTTT	TCACTTCTAA	GTAAGTCGAA	CTATTTTGCT	TTACAACAAG	TGCGACTCTA	1200
AATACAGTTG	GACACACATA	CGAGCAACTG	TATACCTTTT	AATCAGTTTT	CTATATTTTA	1260
TTTATTATAT	CTGTCTTAAT	GATAAAAATT	GTTACAAACA	GTTTAACATA	TTTAGCTACC	1320

ATGATACCAC TATGCTTGCh TATCTCTATA GCGCCATTGA TACACATTTT TAAATATCTA 1440  
TACTGCCCGTT AGAATTTTAT CATGTCThAA TT 1472

(2) INFORMATION FOR SEQ ID NO: 584:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 787 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 584:

GGTAGTGAAT GGGGTTCAAG ACAACAGTAT TGGAAGTACG AATGAATCAC AGTTTTTAGG 60  
AAATTATATT GTAATTAAGC ACGCAGAAAA TGAGTATAGC TTAATAGCTC ATTTACACCA 120  
ATATTC AATC ATTGTGAATG AGGGGCAAAA TGTAAATAT GGTGATATCA TTGGGAAGGT 180  
TGGAATTCT GCAATTCTA CTGAACCTCA TATACATTTT CAAGTAATGA ATGATAAGAA 240  
TATTGAAGCA TGTACATCTT TAAAAATTCG ATTTATAAAT AATCGAGAAC TTATCAAAGG 300  
GGATGTGGTC TGCGGATTAC AAGCTGAATG ATGGCGATAC TTATAAAATC TCGACACTAT 360  
AAAAATGGTA TAGTGTGAG ATTTTCTTGC TTATTAGTT AATTCAAAGT GCACGCCGGA 420  
TTCATTAGAA GTCGACGTAT TTTTGTGTGT AATAGAGTAA CCGGTCATTG AAATTTTAGA 480  
TTCAATATCT GAAGCGGAAT TTGTAGATTC AGGATTATAG AAGCTACATT CATAAGTGTT 540  
ATCATCTTTC TTTTAAGTA TAAACATACC TTTGGCTTTA ACTTCGACTT TAGTGTGTGT 600  
AATGTCAAAA GTTTGAGTGC TATTACTATA ATTAACACCA GCCCAAACCG ATTCATTATC 660  
TTTCAACAG GGAAGTCAT CTTCTTGCTT AACGACGThA CTTTCATCTTT CTCTGTCTTA 720  
AAGACATCTT TAGATAAGCC TGGATACAAC ACATATCCAT ATTTATTGTC AGAATTAGAA 780  
TGCTTTT 787

(2) INFORMATION FOR SEQ ID NO: 585:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 830 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 585:

ATGCTAAATT AGGGGGAATA TTTACGATAA AGAGACCAGA AAAATAATAA AACACATGCT 60

TAAAATGAAG ACTATTTTTT ATTACAAGAA AATGTATCTA GTAAACTTAA AGTAGCAAGA 180  
 CCTAATAAAT TTAATGCATG TTGTGCACCT TTTTACCTT GGCCAGCTTC GAAATGTTTG 240  
 5 TAAGCAGCTA CACTTAAAT GCCTATCGTT GATAGTGATG CAAGGCGAGA AATGTTTTTA 300  
 TTGATAAAGC TAGCTGAGTA TAAAGCAGCA GTAGTTGCTT CTGCAATGCC GACGTATTTT 360  
 ACAAGTTCTT TTTGCAAGCC AAAAGTATGT TCAAACAGTT CAATCATACC CTTATCTTCT 420  
 10 TGCAATTTAG GTTTACTGGC TTGGTATAGC TCTTCGCAA GTTTTAAATT CGTTGCGTAA 480  
 CGCAAAATCA TATTTAATTC CTCCCAATAT TTGATTTTTT GTGAAAGATG ATTACTTTAT 540  
 CATTTTACC CGTTTCTATA AAAATGAATC AATTATGTAA CGTATGTGTA GTTTAGGAAT 600  
 15 GTTTGCTATG GAAATATAAT TCTGTTCACT CAAAATGTAT GAAATTAATG TGTAGTTTGT 660  
 TCGAGTTGCT CTTTAAATTT GGTAGATTG TTTTGTAGAG AAGCGGTACT ATTTTAAAGT 720  
 20 GCATCAACAG ATTTACCTTC GTTTGAGAC ATTGAGTTTA TTACAGCACG AAGTTCTGTT 780  
 TCTAGTATGT CaGCGTCGct TTAGCATTAG AACTTAaTat TTAtAcTCTT 830

## (2) INFORMATION FOR SEQ ID NO: 586:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 586:

35 TTAGGACGTT TTTACAATCA GTACAATGAG CTCATTGTTA TTAGTCCTTT AACGGCGTCT 60  
 TTTAATGCTG GCGCTACATT TGGGCGATTT CATCATTTAA TTGATACTGA AACTTTAGCA 120  
 AAATTAGAAC ATGAAAAAGG ACATTATTAT CAGAAGATGA TATGTGATGA CAATGTAGAA 180  
 40 ATGATTTCTA TAAATAACAT ACCGAAATAT CCGAGAAATC ATAATGTATT AACTAATCAT 240  
 GACTCATACG AATATTCATT GAATTTAGGA AGTAGTAATA GTTATTCAAA GTATGAGCTT 300  
 ACCTTAGATG ATATTTATGT TGGTGCTACC TTTtAACAAA TTATATTTAT ATTCTAGCCm 360  
 45 ACTAAATAAA AGGGkaCtaT TTGaATCaAA CmATaTgTaT TAACCTTTTT TA 412

## (2) INFORMATION FOR SEQ ID NO: 587:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4709 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 587:

	TTCAGTTTGA AATTAATCAT ATAAATTTCT TATGGGAGGG TTGATATCTT AATGATTAAC	60
5	ATTATTTTCAG CTATAGGATC TATTGGAACA TTTATTATGG CTTTATTTTA TTTTGTATCA	120
	GTTTCAGTTC AACTTTATCA AATGAAAATT AGCTTTCTGC CAGCTTTAGG TTTTAACCAA	180
10	ATTTTATTAG AAAGGGAGGA GGATCAACTT AATATAATGA ATTCTGGCAAC AGAAGAGCAT	240
	CATCATAAAG ATTATATTAA ACTATATAAT TTAGGTGGCG GTGCTGCTAA TAAAATTGCA	300
	ATAGAGGTTT TATTGGGGAA GGATrAGTC ATTCAGAAAA AATACGTGCA TATTkTACCT	360
15	AGTAAAGAAG GGTACATGTT ACCAATTAAT AAAAATGTGT ACGAAGAATT AGAAAGAACG	420
	ATTGAsAACA ATGGTCATGA AGCTGATTG AATGTACGTA TGACTIONTA TCATAATGTA	480
	AGTCGCAAAAC AACAGGAAGT TATATTAAAA GGTCAAATCG ACCGTTTTAA TACTTATAAT	540
20	AATAAGAAA TTTATGATTT GCAGTTTATC TAAAAATTGA TTTAAGAGGG TAGTTGTTTA	600
	TTGCGAAAAA TATCATTCAA TTTAATGAA ATAATGGCGT CATTACTATA AAATATTACT	660
25	TTATGTTGTA ATGCATTTTT CTATAAGATA GAACTAAAAG GAGGGGCAAA GATGCAAATT	720
	AGACAAATAC ATCAACATGA CTTTGCTCAA GTGGACCAGT TAATTAGAAC GGCATTTGAA	780
	AATAGTGAAC ATGGTTATGG TAATGAATCA GAGCTAGTAG ACCAAATTCG TCTAAGTGAT	840
30	ACGTATGACA ATACCTTAGA ATTAGTAGCT GTTCTTCAA ATGAAGTTGT AGGGCACGGT	900
	TTACTAAGTG AAGTTTATCT TGATAACGAG GCACAACGGG AAATTGGATT AGTGTTAGCA	960
	CCTGTATCTG TTGATATTCA TCATCAAAAT AAAGGTATTG GGAAGCGATT GATTCAAGCA	1020
35	TTAGAACGAG AAGCAATATT AAAAGGATAT AATTTTATCA GTGTATTAGG ATGGCCGACG	1080
	TATTATGCCA ATCTAGGATA TCAACGCGCA AGTATGTACG ACATTTATCC ACCATATGAT	1140
	GGTATACCAG ACGAAGCGTT TTTAATTAAA GAATTAAAAG TGAACAGTTT AGCGGGAAAA	1200
40	ACAGGTACCA TAAATTACAC ATCTGCTTTT GAAAAAATAT GATTTCAGC TAGGATTACA	1260
	TTAGGTAGAG TTCATATTAA TAATAAAAAA TGTTTGCAAT CAAATCGTAC GTTGTCGTTT	1320
45	GTAATTCTTA AAATAGCAAT AAATAAAATG TTTGTTAGTA AAGTATTATT GTGGATAATA	1380
	AAATATCGAT ACAAATTAAT TGCTATAATG CAaTTTTAGT GTATAATTCC ATTGACAGAG	1440
	ATTAAATATA TCTTTAAAGG GTATATAGTT AATATAAAAT GACTTTTTAA AAAGAGGGAA	1500
50	TAAATGAAT ATGAAGAAAA AAGAAAAACA CGCAATTCGG AAAAAATCGA TTGGCGTGCC	1560
	TTCAGTGCTT GTAGGTACGT TAATCGGTTT TGGACTACTC AGCAGTAAAG AAGCAGATGC	1620
55	AAGTGAAAAT AGTGTTACGC AATCTGATAG CGCAAGTAAC GAAAGCAAAA GTAATGATTC	1680

GTCAAACACT AATAATGGCG AAACGAGTGT GGCGCAAAAT CCAGCACAAC AGGAAACGAC 1800  
 ACAATCATCA TCAACAAATG CAACTACGGA AGAAACGCCG GTAAGTGGTG AAGCTACTAC 1860  
 5 TACGACAACG AATCAAGCTA ATACACCGGC AACAACCTCA TCAAGCAATA CAAATGCGGA 1920  
 GGAATTAGTG AATCAAACAA GTAATGAAAC GACTTCTAAT GATACTAATA CAGTATCATC 1980  
 10 TGTAATTCCT CCTCAAAATT CTACAAATGC GGAAAATGTT TCAACAACGC AAGATACTTC 2040  
 AACTGAAGCA ACACCTTCAA ACAATGAATC AGCTCCACAG AGTACAGATG CAAGTAATAA 2100  
 AGATGTAGTT AATCAAGCGG TTAATACAAG TGCGCCTAGA ATGAGAGCAT TTAGTTTAGC 2160  
 15 GGCAGTAGCT GCAGATGCAC CGGTAGCTGG CACAGATATT ACGAATCAGT TGACGAATGT 2220  
 GACAGTTGGT ATTGACTCTG GTACGACTGT GTATCCGCAC CAAGCAGGTT ATGTCAAAC 2280  
 GAATTATGGT TTTTCAGTGC CTAATTCTGC TGTAAAGGT GACACATTCA AAATAACTGT 2340  
 20 ACCTAAAGAA TTAAACTTAA ATGGTGTAAC TTCAACTGCT AAAGTGCCAC CAATTATGGC 2400  
 TGGAGATCAA GTATTGGCAA ATGGTGTAAT CGATAGTGAT GGTAATGTGA TTTATACATT 2460  
 TACAGACTAT GTAAATACTA AAGATGATGT AAAAGCAACT TTGACCATGC CCGCTTATAT 2520  
 25 TGACCCTGAA AATGTTAAAA AGACAGGTAA TGTGACATTG GCTACTGGCA TAGGTAGTAC 2580  
 AACAGCAAAC AAAACAGTAT TAGTAGATTA TGAAAAATAT GGTAAGTTTT ATAACCTATC 2640  
 TATTAAAGGT ACAATTGACC AAATCGATAA AACAAATAAT ACGTATCGTC AGACAATTTA 2700  
 30 TGTCAATCCA AGTGGAGATA ACGTTATTGC GCCGGTTTTA ACAGGTAATT TAAAACCAAA 2760  
 TACGGATAGT AATGCATTAA TAGATCAGCA AAATACAAGT ATTAAAGTAT ATAAAGTAGA 2820  
 35 TAATGCAGCT GATTTATCTG AAAGTTACTT TGTGAATCCA GAAAACCTTG AGGATGTCAC 2880  
 TAATAGTGTG AATATTACAT TCCCAAATCC AAATCAATAT AAAGTAGAGT TTAATACGCC 2940  
 TGATGATCAA ATTACAACAC CGTATATAGT AGTTGTTAAT GGTCATATTG ATCCGAATAG 3000  
 40 CAAAGGTGAT TTAGCTTTAC GTTCAACTTT ATATGGGTAT AACTCGAATA TAATTTGGCG 3060  
 CTCTATGTCA TGGGACAACG AAGTAGCATT TAATAACGGA TCAGGTTCTG GTGACGGTAT 3120  
 CGATAAACCA GTTGTTCTTG AACAACTGA TGAGCCTGGT GAAATTGAAC CAATTCCAGA 3180  
 45 GGATTCAGAT TCTGACCCAG GTTCAGATTC TGGCAGCGAT TCTAATTCAG ATAGCGGTTT 3240  
 AGATTCGGGT AGTGATTCTA CATCAGATAG TGGTTCAGAT TCAGCGAGTG ATTCAGATTC 3300  
 AGCAAGTGAT TCAGACTCAG CGAGTGATTC AGATTCAGCA AGCGATTCCG ACTCAGCGAG 3360  
 50 CGATTCCGAC TCAGACAATG ACTCGGATTC AGATAGCGAT TCTGACTCAG ACAGTGAATC 3420  
 AGATTCCGAC AGTGAATCAG ATTCAGATAG CGATTCTGAC TCAGACAGTG ACTCGGATTC 3480

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	CGATTCTGAC TCCGACAGTG ATTCCGACTC AGACAGCGAT TCAGATTCCG ACAGTGATTC	3600
	CGACTCAGAT AGCGATTCCG ACTCAGATAG CGACTCAGAT TCAGACAGCG ATTCAGATTC	3660
5	AGACAGCGAT TCAGATTCAG ATAGCGATTG AGATTCCGAC AGTGAATCAG ATTCCGACAG	3720
	TGACTCGGAT TCAGATAGCG ATTCAGATTC CGACAGTGAC TCAGATTCCG ACAGTGACTC	3780
	AGACTCAGAC AGTGATTCCG ATTCAGCGAG TGATTCCGGAT TCAGATAGTG ATTCCGACTC	3840
10	CGACAGTGAC TCGGATTTCAG ATAGCGACTC AGACTCCGGAT AGCGACTCCG ATTCAGATAG	3900
	CGATTCCGAC TCAGATAGCG ATTCAGAATC AGACAGCGAT TCAGATTCAG ACAGCGACTC	3960
15	AGACAGTGAC TCAGATTCAG ATAGTGACTC GGATTTCAGCG AGTGATTTCAG ACTCAGGTAG	4020
	TGACTCCGAT TCATCAAGTG ATTCCGACTC AGAAAGTGAT TCAAATAGCG ATTCCGAGTC	4080
	AGTTTCTAAC AATAATGTAG TTCCGCCTAA TTCACCTAAA AATGGTACTA ATGCTTCTAA	4140
20	TAAAAATGAG GCTAAAGATA GTAAAGAACC ATTACCAGAT ACAGGTTCTG AAGATGAAGC	4200
	AAATACGTCA CTAATTTGGG GATTATTAGC ATCAATAGGT TCATTACTAC TTTTCAGAAG	4260
	AAAAAAGAA AATAAAGATA AGAAATAAGT AATAATGATA TTAAATTAAT CATATGATTC	4320
25	ATGAAGnAAc rCCTTAAAAAG GTGGCTTTTT TACTTGGATT TTCCAAATAT ATTGTTTGAA	4380
	TATAATTAAT AATTAATTC TCAACAGTTA ATTATTTTAA AAAGGTAGAT GTTATATAAT	4440
30	TTGGCTTGGC GAAAAAATAG GGTGTAAGGT AGGTTGTAA TTAGGGAAAA TTAAGGAGAA	4500
	AATACAGTTG AAAAATAAAT TGCTAGTTTT ATCATTGGGA GCATTATGTG TATCACAAAT	4560
	TTGGGAAAGT AATCGTGCGA GTGCAGTGGT TTCTGGGGAG AAGAATCCAT ATGTATCTAG	4620
35	TCGTTGAAAC TGAATAATAA TAAAAATAAA TCTAGAACAG TAGAAGAGTA TAAGAAAAGA	4680
	TTGGATGATT TCAATATGGT CChTTCCCA	4709

## (2) INFORMATION FOR SEQ ID NO: 588:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1554 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 588:

50	CTTTTTTAAt TAwCgGaAtA TTGtCaTgaT tAcAcTTTCgt TAGGGTTTAc gTCGtAATTT	60
	CATTTAaTAA gCgCTTCaCc ATTAAAtGTG gTAmCCTTTA ATTCGCCAGT AGAAACATCA	120
	CAGTAACTAA GCGCAATTTc AGGTTGATTC ATAACAAAAC TTAAATATA GTTATTTTGT	180

CGTCTAACCA TACCTTTCGT TTGTTTCGGA TCTTCCATCT GTTCACAAAT AGCTACTTTA 300  
 TATCCATTAT TAACAAGTGT ATCTATATAA CTATCTGCAG AATGATACGG AACACCACAC 360  
 5 ATCGGAATTG GATTTTCTTT TTTAGCATCT CTTTITAGTTA AAGTAATTTT AAGTAYACGT 420  
 GATGCCTCCT TGGCATCTTC ATAAAACATT TCATAGAAAT CACCTAGTCT AAAAAATAAT 480  
 AAGCAATCTT GGTATTCTGA TTTTATTTTT AAATATTGCT GCATCATTGG TGTAACATTA 540  
 10 GACATATTAT TTCTTCACAA CCCTTGTCTC TTTTAAAT TTGTCTTTAC AATATATTTCG 600  
 TTTGTAAGYT TTTTAATTAT TAATTATTTA ACTTATACAT TTTAACATAC TTACTTTTAC 660  
 AAACCTATTC ATACCATATA ATCACGAAGC ATCTTAAATG TATAAGAAAA CGCCTCAAAC 720  
 15 CTAATAAAAT GTGTCAATAG CATGTTTAGA ATTAAATTAA AATTCTAACA TTCAAGACAT 780  
 TTAATTAAGT AAGGGCGTTC AATATTAAAA TGAACAATGA CTCTGTTTGA AATCATATAT 840  
 20 CATAAAATTA TTTTATAAAC CTTTGAAGAA TACCACGTTT TTTTAGAGTA ATTAATAAGA 900  
 AATAACTTAT AATAGATCCG ATAGCACTTG aGACTATGaA CGTAATCATT AACGGTTTAA 960  
 TGAAGAAGTC TTGAAGCCCA AGGaAATATG CTAATGGtAT aCaAATTAAA cTTCCgATGA 1020  
 25 CaCCAGTTCC aAGTACTTCa CCGACCGCGG CCaTAAATAT ATGTTTACGA TATnygTAAA 1080  
 ACATACTAGC CAATAAACT CCAATCATAC TACCCGGAAG TGCAAAAGst GTACCAGTAC 1140  
 CAAAAAGAAC TCTTAAATTT GATGATATAA GCGCTTGAGC TAATCCATAC CAAGGACCTA 1200  
 30 CTATGACCGC ACTTAATACA TTTACAAAAT GCTGTACTGG TGCTGCCTTA ACTGGTCCTA 1260  
 GAGGAATGAT GATAATACTG CTTAATACAA CATTATTGTC AATTAAAAGT GCAGTTATAG 1320  
 CCAGTTTTCT TGATTTCATA TGATTGTTCT CCTTTTGTGTT TGTAATTAAT CACTATGCTT 1380  
 35 GGCTTTATTA TGGTCATTTA AACGTGTTTC CATTGTTGAT ACAAACATTT TCAATAATTG 1440  
 ATTCGCTTCA TATTGTGAAG TTTGAACTG TTCAACTATG GGCAATGTAT TTATTTCTGC 1500  
 40 TTCTAtACTC TGAATGGtAT GTTCCGACTG nTCCAGCGCA TTTGTTTCCC GnAA 1554

## (2) INFORMATION FOR SEQ ID NO: 589:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 589:

TTTTGACGAA AAAAGTTGAT TTACAAATAT ATAAACGTTG TGATTTCaAT GTTTGTATAG 60

TATATACATG ACAGCAACTT GGGAAAAAAA GGAAGGTAAC GAAGGTTTAT TAACTGTTAC 180  
 TGTTCTGCA GAAAAAGTAA ACAAAGCrCT GAGAGATCCC CTCATAATTT CCCCAGCG 240  
 5 TAACCATGTG TGAATAAATT TTGAGCTAGT AGGGTTGCAG CCACGAGTAA GTCTTCCCTT 300  
 GTTATTGTGT AGCCAGAATG CCGCAAACT TCCATGCCTA AGCGAACTGT TGAGAGTACG 360  
 TTTCGATTTC TGACTGTGTT AGCCTGGAAG TGCTTGTCCT AACCTTGTTT CTGAGCATGA 420  
 10 ACGsCCGCAA GCCAACATGT TAGTTGAAGC ATCAGGGCGA TTAGCAGCAT GmTATCAAAA 480  
 CGCTCTGAGC TGCTCGTTTCG GCTATGGCGT AGGCcTAGTC CGTAGgCAGG ACTTTTCAAG 540  
 TCTCGGAAGG yTTCTTCAAT CTGCATTGCG TTCGAATAGA TATTAACAAG TTGTTTGGGT 600  
 15 GTTcGAATTk CAACArGTaA GTtAGtTGCT AGAnCCCA 638

(2) INFORMATION FOR SEQ ID NO: 590:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 590:

AAAATATTCC CGTACATTTT GATGTCTGTA GGGGCTTTTT TGACTTTAGG ATTTGTCATT 60  
 30 TTTTCAATTC ATAAAGGGAG ACGAACGAAA AATGAATCAG CACGTAAAAG TAACATTTGA 120  
 TTTTACTAAT TATAATTACG GCACATATGA CTTAGCAGTA CCAGCATATT TACCGATAAA 180  
 35 AAACCTTAATA GCTTTAGTAT TGGATAGTTT GGACATTTCA ATATTTGATG TCAATACACA 240  
 AATTAAAGTG ATGACGAAAG GTCAATTACT TGTTGAAAAT GATCGACTCA TTGATTATCA 300  
 AATCGCTGAT GGAGATATTT TGAAGTTACT ATAGGAGGGA AAATAGATGG TTAAAAATCA 360  
 40 TAACCCTAAA AATGAAATGC aAGATATGTT AACGCCTTTA GATGCTGAAG AAGCAGCTAA 420  
 AACAAAATTA CGCTTAGATA TGAGAGAGAT TCCTAAGTCT TCAATTAAAC CAGAACATTT 480  
 TCATTTAATG TACTTATTAG AACAACTTC TCCATATTTT ATAGATGCTG AATTAACTGA 540  
 45 ACTACGTGAC aGTTTCCaAA TACATtATGA CATTAAATGAC AATCATACAC CTTTTGATAA 600  
 TATTAAATCA TTTACTAAAA ATGAAAAATT ACGTTACTTA CTCAATATCA AAAATTTAGA 660  
 AGAaGTAAAT CGTACACGCT ACACATTTGT GTTGGCACCA GATGAATTAT TTTTCACAAG 720  
 50 AGATGGATTA CCCATTGCTA AAACAAGAGG GTTACAAAAT GTTGTGATC CATTACCTGT 780  
 GTCAGAAGCT GAATTTTTAA CAAGATATAA AGCGCTGGTT ATCTGTGCAT TCAATGAGAA 840

AACTAAAGTT ATTGAAGCGG CAACGTTAGA TTTACTAACG GCATTTTTTAG ATGAACAGTA 960  
 TCAGAAACAA GAACAAGATT ATAGTCAAAA TTATGCATAT GTACGCAAAG TAGGACATAC 1020  
 5 CGTTTTCAAA TGGGTTGCTA TCGGTATGAC AACGTTAAGT GTTTTATTAA TTGCATTCTT 1080  
 AGCCTTTTTTA TATTTTTCAG TAATGAAGCA TAATGAGCGC ATTGAAAAAG GATACCAAGC 1140  
 ATTTGTAAAG GATGtTATAC GCAAGTACTA AATACGTATG ATGATTTAGA TGGTaAAAAAt 1200  
 10 TgaTAAAGAG GCACTTTACA TTTATGCCAA AAGTTATATC CA 1242

## (2) INFORMATION FOR SEQ ID NO: 591:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 744 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 591:

TTCCAGATAG AGCCTTAGTT GCTGCCGCTG AATTGTCTGA TCGTTACATC ACTGATCGTT 60  
 25 TTTTACCAG ATAAAGCGAT TGATTTAGTT GACCAAGCAT GTGCAACAAT TCGTACGGAA 120  
 ATGGGATCAA ATCCAAGTGA ATTGGATCAA GTTAATAGAC GTGTCATGCA ATTAGAAATT 180  
 GAAGAAAGCG CACTTAAAAA TGAATCTGAC AATGCGAGCA AACAGAGATT ACAAGAACTA 240  
 30 CAAGAAGAGC TTGCCAATGA AAAAGAGAAA CAAGCAGCAC TTCAATCTCG TGTAGAATCA 300  
 GAAAAAGAAA AAATAGCAAA TTTACAAGAA AAACGTGCGC AACTAGATGA AAGTAGACAA 360  
 35 GCGTTGGAAG ATGCACAAAC AAATAACAAT TTAGAAAAAG CTGCTGAACT ACAATATGGA 420  
 ACAATTCCTC AATTGGAAAA AGAACTTAGA GAATTAGAGG ATAATTTCCA AGATGAGCAA 480  
 GGTGAAGATA CAGATCGAAT GATTCTGTGA GTTGTAACAG ACGAAGAAAT TGGCGATATT 540  
 40 GTCAGCCAAT GGACAGGCAT ACCAGTTTCA AAATTAGTTG AAACAGAACG TGAAAAATTA 600  
 CTTCACTTAA GTGACATCTT GCATAAACGT GTTGTAGGTC AAGATAAAGC GGTGACCTG 660  
 GTTTCAGATG CAGTAGTTAG AGCAAGAGCA GGTATTAAAG TnCAAACAGA CCTATTGGTA 720  
 45 GTTTCThATT CCTAGGTCCn ACTG 744

## (2) INFORMATION FOR SEQ ID NO: 592:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 592:

	TTGTTATAGT GTCTGAATCT GTGTAACCTCT TGCCCATGTG TTCTGAGTAA AGCACCCACT	60
5	GTTTATTAC TTTTCGTTGT AGTCTAGCTT CGTGTAGTAG TTTGTTTAAAC TTTTGTGCTG	120
	ATATACCGTA GTCTGCCGCG ATTTGAGTTG TGGCTAATGT GCCAGTTGAT TTTAAGATTT	180
10	CATCAACATA ATCTGCTTTG GGTTTTAGCT CTCCAATTTT TTGTTGTAAA AGTAAGTTTT	240
	GCTCTTTTTC TTTCTTATAC TCAGTCAACA CTGTAATGAT GTAGTCTGGA TCTTTTAATG	300
	TTTGTTCAT TACATTGTCT GTTGCCTATA TACCGTGTTC GCGAATAGCT GGTaGGACAT	360
15	CTGATGTTAC CCAGCGTTTG AATTTTCTAG CGGTTTCTCT AATTTTTCG TTTTGTCTTT	420
	GTTTAGAAGC ATCGAAGATT AGACTGTATA ATCCTGATTC GTTGATAATG ATCATATTTT	480
	TGTTTTGACC TGATGCACTA AATTGGTGCG TCAGTTTGTC CTCGCTATCA ACATGATTTT	540
20	TAATGGCATT GTCTGATCTT GCATATCCTA AAATCTCAGC AATATCTTTT CCTACAAAAT	600
	AAGGTTGCTT TTCAATTTCT ACTGTTCTTA CTGGTAGCTC TTTAAAATTA AATGTTTGTA	660
	ATGCTTGCAAT TTGAGTATCC TCCTTTTTCC TCAACACCCA CATTGAGCAG ACGGTTATCG	720
25	CAATGACTAT CGAATGTATT TAAACGCGGC TCATATCATC GCCAGcTCTC GCTCACATCT	780
	GCTCAATGTG GATGTTGATA AGCGTGTTA TATTAAGAAG TGAATGTTAC TGATTCACCT	840
30	TCCGCCACTC TGTTAAATCA GTAACCTTGT TATCGCTTTC AACACCGTTA AGCTTGTCTA	900
	ACGCTTTCAC TACTTTTTGG AACTCTTGA TAGCACTtCG TAGCTTTTTA GTAATTCAT	960
	CTTCTACCAT TTCCAAACCA GCAAATGCGT CTTCGTTATT CATGCTTAGA TGTTTGTGA	1020
35	AAAGATCTCG AGTGTATCTT ATTTCTTTAA GTGATTTATC ATAAGCTTCA ATTTGTCTTG	1080
	AAAGGTTATG ATATTTTAGT TGTAGTTTTA CTAATTTTAA TGATTGGTCT TGCATTTGTT	1140
	ATGTCTCCTT TAAGATGTTT GTTTCGTTT CGTGTACTTT GTGGGTAAAA AAATATCTCC	1200
40	AATATTTTCG TCAAAAAAAT CAGCGATAAT AAACATCTCA TCATTCTTAA ATTGATGCTT	1260
	TCCTAATTCT TTTAAACGAT AACCTTCAGT TGATATATTC AAGAGGTTTG CTAAATCTTC	1320
	TTGAGTACAC TTTCTTTCTT TTCTCAACTT TATTAAATTC CATTGCATGT TGTCACCTCC	1380
45	CGCTTTACAA AACCTACTAT ACACGATACG GTACTTGnGT CAACATAAAA GTTTGCTTTT	1440
	CGTGTATTT	1449

## (2) INFORMATION FOR SEQ ID NO: 593:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1170 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 593:

5 ACCAAAAACA CTTTCTAAAG AAATTGTTTC AGAACCATT T GCTAAAAACC AATTACGTGA 60  
 AAAAGCTCGT CTAAC TAACA TTAAAGGTTT AGAGATTCCA AGAGTTTCAT AACTTTTAGA 120  
 CGATGATGAT TTCATTACAG ACGTAGAAAC AGCAAAAGAA TTAAAAGCAA AAGGTGATAC 180  
 10 AGTCAAGTTC ACTACTAATA AATTCAAAGT ATTTGCTGCA ATTTCAGATA CTGTAATTCA 240  
 TGGATCAGAT GTAGATTAG TAACTGGGT TGAAAACGCA CTACAATCAG GATTAGCAGC 300  
 TAAAGAGCGT AAAGATGCCT TAGCAGTAAG TCCTAAATCT GGATTAGAAC ACATGTCATT 360  
 15 TTATAATGGA TCTGT TAAAG AAGTTGA rGG AGCAGACATG TATGATGCTA TTATTAACGC 420  
 TTTAGCAGAT TTACATGAAG ATTATCGTGA TAACGCAACA ATTTATATGC GATATGCAGA 480  
 TTATGTCAA ATTATTAGTG TTCTTTCAA TGGAACAACA AATTTCTTTG ACACACCAGC 540  
 20 AGAAAAAGTA TTTGGCAAAC CAGTAGTATT TACAGATGCA GCAGTTAAAC CTATTGTGGG 600  
 AGATTTCAAT TATTTTGGAA TTAATATGA TGGAACAAC TATGACACTG ATAAAGATGT 660  
 25 TAAAAAAGGC GAATATTTGT TTGTATTAAC AGCATGGTAT GATCAGCAAC GTACATTAGA 720  
 CAGTGCATT C AGAATTGCAA AAGCAAAAGA AAATACAGG CATTACCCA GCTAAGCCCC 780  
 AAAAGGTAA TGTAACAGCT AAGGCTAAAT CAGCTGTAAT ATCAGCCGAA TAGGGGTGAT 840  
 30 GAAATGAGTT TAGAAGAAK TAAATTGTGG TTGAGAATTG ACTATAATTT CGAAAATGAT 900  
 TTAATTGAAG GTCTCATTCA ATCGGCTAAG TCTGAATTAC TATTAAGTGG GGTnCCAGAT 960  
 TATGACAAAG ATGACTTGGA ATACCCGCTT TTTTGTACAG CGATTAAATA TATCATTGCA 1020  
 35 AGAGATTATG AAAGTCGTGG ATACTCAAAT GACCAATCTA GAAGCAAGGT GTTTAATGAA 1080  
 AAAGGATTGC AAAAAATGAn TTGAAATTA AAAAAAGTGGT AGGTGATTTT TAAATGGAAT 1140  
 40 TTAATGAATT TAAAGATCGC GCGTATnTTT 1170

## (2) INFORMATION FOR SEQ ID NO: 594:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 594:

50 TGAAGGGTGT TTTGTTTATG GCCAATTGCT GTGTTATTAA AnCGAATGTT TCGAATGGAA 60

55

ATCATTCCGG AAGAGGACAT GTCTTCAGCT TCTGATTGGA AAGCACAGTT TTATCGCGGT 180  
 ACTTTGCAGC GCTTTTACCA AtCnTTGCAC GCAGAAAAGC TTACACCTTA TGTTATGTCT 240  
 5 TATGACGATA TCATTTCAAT TTGTAAAGAA AACAATATCT CTGAAGTAGT GACTGCGGGT 300  
 GATATTATGA GTTATCATCT TGAAGAATAT GATATTTTAC ATCAACGTTT TTTATTCAAT 360  
 10 GAAGCACGCA TTGCCGTTAC TTTGATACGT GGAATCATT ACTTTAAAGC GAGTAAAACA 420  
 ATGAATCAAC AAGGGGAGCC ATACAATGTT TTTACTAGTT TCTATAAAAA ATGGCGACCT 480  
 TACTTGAGGC ATAGAGACGT ATATCACTAT GATTTAAAAT CATTGCAAAA CTTTGTCAAT 540  
 15 GCATCACCTG ATGATTTAGT GTTTGATGAC ATAGCATTG GATCCTCACA aATAATTGAA 600  
 CAGatAAATG GCAACATTTT TTAGATCAAG ATATACAGAA TTACGAAAGC GGAAGAGACT 660  
 ATTTACCTGA AGTATTAACA AGTCAGCTAA GTGTTGCTTT AGCATATGGA TTATTAGATA 720  
 20 TTATTGAAAT TTTAATGAT TTATTGGCGC GTTATGATGA AGATGAGGCA AACTATGAAG 780  
 CATTTATACG TGAATCATT TTTAGAGAAT TTTATTATGT GTTAATGACA CAGTATCCTG 840  
 AAACCTCATA CCAAGCTTTC AAACCTAAAT ATCGACAGAT AAAATGGTCG CAAAATGAAG 900  
 25 CGGATTTTAA TGCATGGTGC GAAGGGCAAA CAGGATTTC AATCATTGAT GCAGCAATAA 960  
 TGGAATTGAC ACAAACTGGT TTTATGCATA ATCGAATGAG AATGGTTGTG TCGCAATTTT 1020  
 TAACCAAAGA TTTATTTATA GATTGGACAT GGGGAGAAAA ATTCTTTAGA AAGCACCTTA 1080  
 30 TTGACTATGA TGCAGCATCA AATATTCATG GATGGCAATG GTCTGCTTCT ACAGGTACGG 1140  
 ATGCACTGCC GTATTTTAGA ATGTTTAATC CAATAAGACA GAGTGAACGC TTTGATGCTA 1200  
 35 AAGCTTTGTA TATCAAAACA TATCTCCGA TTTTAAATCA AATTGATGCA AAATATTTGC 1260  
 ATGATACACA ACGCAATGAG TCCAACCTTT TTGAACAGGG GATTGAATTA GGTAGTCATT 1320  
 ATCCAAGACA AATGGTAGAT CATCAAGAAA AACGTACACA AGTTTTAGCT ACATTTAAAG 1380  
 40 CGCTAGACTA ATT 1393

(2) INFORMATION FOR SEQ ID NO: 595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1484 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 595:

TTAACTTGAA AGATTTCCTT GACATCTATA ACTTGATATA TGTGTATATG TCGTTTTTAG

60

5 AAAAATTAAA AAAAGAATAT CTTGATTGGT ATAATCAGAC CTTAGAGTTT TCTAATTTAT 180  
 CAAACAATGT AGTAAGWATA GATACTCCTT TTAAAGATAA TTCTTTAGAT AATTTAATAA 240  
 TTTACGCTTT ATACGATCAG TCCAGAGACA TGATTACACT GACAGATGAC GGCTATACTA 300  
 TATCTGATTT AGAAAATAAT GGTATTTCTT TAAATAAATC AAAAAAACGT AAAAAGATTT 360  
 TTGAAGAGCA CCTTTCAGCT TACGGTATTA AATATAACGA TAAAACTCAC GAAATTTTGT 420  
 10 TTCAAATAA CTTTAAAAAT TTTAATAAAT CGAAACATAA TTTATTACAG TGCCTTATAT 480  
 TTGTTAATGA TATGTACTTA CTTTCTAATC CTAAGTCACA GAACATATTT ACAGAAGATG 540  
 TTGCAAACAA ATTGGATGAA CATAACATTT ATTACGGAAG AGATTTACCT ATTATAGGAA 600  
 15 GCAGTGGTGT TGTTCAATAT TTCGACTTTT TTATTAGCGC TAAGAAAAAT CAAAAAGAAA 660  
 AATTTATCAA TGCTATTTCT AACCTAATA ATTCTATGAT TATTAAGTCG AAAATAACGG 720  
 ATGCTATGCA AGCAAAAAAA ATAAAAAGAC ACAGGCAAAA TGAGTTTATT TTTATTTTAA 780  
 20 ATGACTCAA AAAAGAAATA AATGAACATA ATAAAAATCT TCTTCATGAA AACTATATTA 840  
 GTACAATAGA TTATAGCGAA TTAGATGAAA AGATAGGTTT ATTGATTTAA TATATATAGA 900  
 CGTGATAATA TCAATGTTTA TATTAAATGA AACGAATTTG AAAATTTTGA AACAGCTTAA 960  
 25 GATAGCAAAT TGAATAGCCT TATTGATAAT GCAGAATCGT CTACACTTAG TTGAACAAAT 1020  
 TCTATGAGAA TAGATATTGT TAACTATTT GGGTAGGCGA TTTTATTTTG ACAAGAGTCA 1080  
 30 GAAGATTATT TAGTTCATAG TTAAAGTTAC AAATGGCTAA ACTTTATGAA AATGGTATGA 1140  
 CTAGAATCGA AATTATACTC GAATACGATT TAACACTCTC AATCTTCTCG AACTGAATAA 1200  
 ATACTGGGTC ATTCAATCAT CAAGACAACT TAATAAGTGA TGATAAATGT TCATACCATT 1260  
 35 TTGCAAATAT AACCAGATAC TCTCAACAAA ATGTAGAGTT CAAAATTAAA AATGTCCCTA 1320  
 ATTGGCACAT TGCTGTATGA TAATAAATTC AACTTAGATT TCAACAATAT AACTAATGAT 1380  
 GCTTATATTT ACCGCGATAT CAAACCAAAC AGCCCATCCA CAAACAAATT AGAATATATC 1440  
 40 TTGTTAATAA TAGTAAATGA TATATCTTCC AAAGACCGCA AACT 1484

(2) INFORMATION FOR SEQ ID NO: 596:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1435 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 596:  
 55



CTTTATCaTT AAATGCCaTT TTGaATCCTT CTTGAATTTG TTTGATTTC TTTTCAGTAT 120  
 TATTAACCTT GTTCAAGACA GTGCCATTAA TTTTCTTCTT GAGTGGACCA ACCTCATCTT 180  
 5 TATTAGTTGA TTCATGAATC GTTAATCCAA TGTGTGGCTG TATTCTATAA CCATCATTCTG 240  
 CTATAGTTGA AACATATTGT GaTAATTGTA ATGGTGTATA GGTATCATAT TGACCAATTG 300  
 ATAAATCTAG ATAATTACCT GGATTATTTG TTAATGGTTC GATTTGACCT CTTGTTTCAT 360  
 10 TTGGTAAATC TATCCCTGTT TTCACACCTA AGCCTACTTG ATTTAATCCT CTTCTTAGCT 420  
 TTTGGGCAGG TGAACCTATG TCTGAAGGTA AAGCCATACC AGAATAATAA GGGTCTCCCG 480  
 15 CTAATTTTAA TGCTGTTTTA AACATATATA CGTTTGATGA ATGCATCAAA GCTTGCTTAT 540  
 CATTAATAGT TACATGCCCG TTTTATTGTA AGTATGATCG TTTGTCAAA CCACCTTGGA 600  
 AATGTAATGG TTCATCGACC ATTGTTTCTC CAACTTTGAT AGCTTTATTC TGATAACCGG 660  
 20 CTAATAATGT TCCACCTTTT ACAGAAGATC CAACCGCAAA TTGAGAAGTA AACGTACCAA 720  
 TGTCATAATC AGTCATTTTA CCACTCTTAT TAATCTGCTT TCCGGCAAGC GCAAGAATGT 780  
 CTCCATTTTT AGGATTTTGT ACAACCATCA TTGcATTATC CATATCTTTG GCACCTTGAC 840  
 25 TGCGaSTTCT TAATTTGTTT ATCTAATAAT GCTTCTACTT CTTTTTGAAG ATCTATATCG 900  
 ATCGTTAATT TCAAATCTTG ACCGCGAGCG CCAGGrTTTA ACACTTCTGA AGATGTAAct 960  
 TTACCAGATT TGTCCGTGT GTATTTcATT TCTTTCTTCT TACCACGcAA TACATCTTCA 1020  
 30 TATTGATATT CTAGGTAAGA TTTTCCAACA CGATCATTGC GTGAATATCC TTTGGATAAG 1080  
 TAATGTTCTG TCAATTCTTT TGGaATACCT TCAGCAGGTG TCGATACATC TCCGAATATA 1140  
 35 CCTCTTAAAG TATCGCCATA TGGATATTTT CTATCCCAAT CCATAGACGT GTTAACACCT 1200  
 GGTAATTTGG AAAGTTGCTG AGAACTGCT GCATACTCTT TTTCACTGAC ATCTTcATTT 1260  
 TTTATCATTT GTGGATCTAA AACTGTTcCT GGCATTcATC TCTCGAAAA TAGCTAAaAC 1320  
 40 TTGGTAAATC TTTAGAAGAC AATTCATCTA ATTGTGGATT TTCCGGATTT CGGATAACAG 1380  
 TTGGTnTATC CATAATGGAT CCTGGTTTAA TACCTTCCAn CnGGCGAACA TAGCC 1435

(2) INFORMATION FOR SEQ ID NO: 597:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 516 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 597:

AGAAAAAGAT TTAGAAAAGA TTACCATTTCG CGACATAACA ACACGCGCTG ATATCAATAG 120  
 AGGGACATTT TACTTACATT ACGAGGATAA ATATATGTTA CTCGCAGATA TGGAAAGATGA 180  
 5 GTATATTTCA GAACTAACGA CATATACTCA ATTTGATTTG TTACGCGGTT CTTCAATTGA 240  
 AGACATTGCG AATACTTTTG TAAATAATAT ACTCAAAAAT ATTTTCCAAC ATATTCATGA 300  
 TAATTTAGAG TTTTATCATA CTATTTTACA ATTGGAACGC ACGAGTCAAT TAGAATTGAA 360  
 10 AATCAACGAA CATATTAAAA ATAATATGCA ACGTTACATT AGTATCAATC ATTCTATCGG 420  
 AGGCGTTCCA GAGaTGTATT TTTACAGTTA CGTTTCCGGA GCAACAATTT CaATTAnnTA 480  
 AATACTGGGG TAATGGACAA ACAGCCCATT TTCAGT 516

## (2) INFORMATION FOR SEQ ID NO: 598:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1955 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 598:

AGTACTTTAC CATGAGGTAA GACTTTATTC CCTGCTTTTA TAGATTGTGC TTTTATTTGT 60  
 GTGCCAGAAC CAATAGtAct GGTcTAATGA TTTTGCACCTC ACATTATCAA TAGCTTTTTG 120  
 30 TTTGTCTTGA CCTTCAACAT CTGGCACTTT ACTATACTCT GCATTAGATG TGTCACTTTT 180  
 TGATTTACCT ACATTTAAAT ATTTCAAAGT ATTTTCCATT ATTGGTTTAA ACGCTTTACT 240  
 AACACCTAAT TCATAAGCTT CTGGTCATT TTTTGTGCC AAGCTCATA CAGCGTATAC 300  
 35 AATAACTTTA GGATTTTTCT TCGGCGCGTC ACCCATAAAA CTTACAAAAT ATGGGTTTGG 360  
 ACCTTTAACG TATCCACCAC CATTAGGTGC AGCGACTTGT GCTGTACCAG TCTTACCTTC 420  
 GACCTCATAA CCATCAATAC GATAGTTTGC AGCGTGACTC TTCTTACTAT TCACAACTAA 480  
 ATCCAATTGC TTTTCAACTT TTTCAGCAGT ATCTTTTGTT ATTGGTTTGC CTGCGATTTG 540  
 TTTTGGCCCT TTATAAAATT GTCTTTTACT AACAGGATTT TCAACGCTAT TCACAAACCA 600  
 45 TGGTTTTAAC ATATTACCAT CATTAAAGAA CGCTGATTGC GCTTGTAACA TTTGAACAGG 660  
 TGTTACTGTT GTCGATTGAC CAAATGATGA CGTTTTTTGt TGCAACTCAT TACTCCATCC 720  
 AATTTGaCCA GGTGCTTCTC CATCAACAT ACCTTTAGTT GaTTTTCCaA ATCCaAATCG 780  
 50 TTCATACCAA GATTTCATTT TGTCTGCACC AACTAAATCT TGTAATGCA TCATCAATGT 840  
 ATTAGATGAA TAAGTAAATC CGAGTGACAT TGGGATTTCA CCCCACCGA CTCTATTCCA 900

AAAAGCACCT TCTTGAATAG CAGCTGCTAA CCCATATGAT TTAAATGTTG ATCCAGGCTC 1020  
 GTATGTGTTT TGATAAAGGT CATTGCCCCA CTTTTTACCA AAGTCTTTAC CAGTTTCAGG 1080  
 5 ATTAAATGTT GGTCGCTGAC TGTATGCTAA AATTTCTCCA GTTTTGGCAT CCATGACAAC 1140  
 CGCAAATAAA TCTTTCGGCT GGTATCTTTC AACCATGCCA TCTAAAGCTT CTTCAACAAA 1200  
 TACTTGAATA TTTGAATCGA TTGTTAAATG GACATCATCA CCACGTTTAG GCTGCTTCTC 1260  
 10 TTTTTTAGTA TTTGGTGCGA TATATCCCCA AATATCATGA ATATATCTCA ATGATCCTTT 1320  
 AGATCCACTT AAATAACTAT CAAAAATCTT TTCAACTCCA AGTGCACCTT TAAGTTCACC 1380  
 15 AGTATCCGGA TTTTTCTGAG CTCTACCAAT TAAGTGTGAT GCAAAATTGC CATTGCGATA 1440  
 AAAGCGTTCT GTTTCAGGCA ATAAAGAAAT ACCAGGCAAA TTCATTTTCT CTATTTTCAA 1500  
 TTTGTCCTGA TACGTTAAAT TTGTTCTTTT GCGTCCAAAT TCAATTGGA AAGCTTTCTT 1560  
 20 TTGACTAAGT CTCTTTTCAA TTTCCTCTGG CTTTCATATTA ATGACTGTAG ATAATTTCTT 1620  
 TGCAGTCTCT TTTTTATCAA CTACATGCCT AGGTTTTTTA GAATTGGCAC TCGCCTTTTT 1680  
 ATCTATTACT GCAACAAGTT TATATCTTTC TACATCTTCT GCTAGCACTT TACCATKACG 1740  
 25 ATCATATATC TTTCCTCGTT CTGGTTGTTG TGCATTCTTA ACTAAATACT TTTCATTTGC 1800  
 CTTTCATGACT AAATCTTGAC CATTAGAATG TCCAGTAATC ATGATATATG AAATTCTTAA 1860  
 30 AACCAATATA AAAAAGAGCA GTCCGAATAA ACCAACAAGT AGGACTGCCC CTATTTTATT 1920  
 TTTTTTAATT TTAATTTTTT TGGTCGCCAT TACTA 1955

## (2) INFORMATION FOR SEQ ID NO: 599:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 704 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 599:

TAGCAAGAGT AGGTGATAAC AGTTCTTTTA ACGTGTGTC TGCTTGCTCA TTTCTGGCT 60  
 45 CATTGTAGAC TAAAATATAA TAAGCGTTTT CAAATAAGTG CTTTTTAGCA TTTAGTACAC 120  
 CAGATTTATG ACTACCAGCC ATTGGATGAC CACTGACTAA ATGAATATTA TGCTTTAATA 180  
 AATTGCATTC GTGTTGCTGT ATCATTGCTT TAGTACTACC AGTATCAGAA ACAATAACAC 240  
 50 CAGGTTTAGT TGGCATATCT ATAAGCTCGC TAAGATATTT ATTTGTGATA GCAACAGGTG 300  
 TTGCATAAAT AATTACATCG GCTTTTTTAA TAGCTTCACT ATAATTAAA CATTTTTCAT 360

TATTAGTATT AGGGTTATGG TATTTTATAT TGCTAGCAAG ACTTCCACCA ATTAATCCAA 480  
 GCCCAACAAA TAAAACTGTT GTCATATAAA TCACCTTATT TCGAAATTTT CAGAATAATA 540  
 5 ACATTGTAAA TGAGCTGTTG ACACAGTGCA ATAGTAAATA AAAATCGATA ATAGCATTAA 600  
 TAGATAAACG GAGATAAATC ATCTACAATA AAGAGTATAG TAACACAATG GCAACGGAGG 660  
 GGTAAATCAA TGGAAACCAAT ATTAGAAATG ATCAAACAT TAAC 704

10 (2) INFORMATION FOR SEQ ID NO: 600:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 600:

CCTCTAAAGG ATCACGAACC TTTTTCATCG TGACTAAGCC TATAATACCC TTAACCTAT 60  
 TATTATTAAC TTTTACCTCT GTGTATTCCC TATCAATTAG GCGACGCCAG TGACGTTTAT 120  
 25 CTATATACTT TACTTTCACA GTCACCAACT CCTGTGCATT ATTATATAAA ACTACATAAA 180  
 TGATGTCATG TCATGATACA GTTTTATAGT TTTTGTTAAT CATATGAAAA TATTTATTAT 240  
 TATTTTACTA CAACTCGCTT CAATTTACTT AAAATAGACA ATATTAATTA GATAGTACAC 300  
 30 ACATTTCTTC ATAAAAGTGA TTTTTCAAAA ATATAAATAA CACACTCTTA TCGTTTTTCAA 360  
 AATCATTTAA TGCTATTTTC ATTAATAACA GCTGAAGCAT CAAATCTATT CTGATTCAAT 420  
 CAAGAATACA TATAAAAATG AAGTGACTCA AAGGTTTATT AACAACTTC AAACCACTTC 480  
 35 ATTGATCACT TTTATTTTAA AGCATATTTT TCGATTACTG ATTAAAGATG CGGATATTGC 540  
 GTAATTAATT CAGATTGCTT AAACAATTCA AACTGCTTAA ACTCAAATGC CGGTTGACAC 600  
 ATACAACCTA CTAAACTAAA AGTATTTGAT ATTTTCGATTG AAGAAGCAAA AATTGTTTCCT 660  
 40 TTAGGCACTA CATATTGCAA TACATCTCCA TTTTGGATAT CAGTACCCAA TGTTCAGTC 720  
 GTATATTCCC CATCCGGATT TATCATATGA ATTGTTAGAG AATCGCCAGC ATGATAGTAC 780  
 45 CATACTTCAT CAGCATCAAT TCGATGAAAA TCGGAAATAT TGTCTCTGT AAGTAAAAAA 840  
 TAAATACTAC TAAACGGCGC TCTGCGTCCA TCTTCAATA CTTCTCGAAT TGTCTCTCTA 900  
 TAGAAACCAC CTTCAAGGATG TGATTCAAGT TGCAATTcAT CaATCCATTG TTCTGCTGAT 960  
 50 TTCATTATTT CAAATCCACA TTATGGAATA CGTTTTGTAC ATCTTCTAAA TCTTCTAATG 1020  
 CATCGATTAA TTTTTCAAAT GTTACTTGGT CCGCTTCAGA AAGTTCAATA TCTGTTTGAG 1080

55

GAACGACTGC AAATTGAT

1158

## (2) INFORMATION FOR SEQ ID NO: 601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 827 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 601:

5	TGATACTTAT TTTTCAATAT TATTTGGAAT AAAnTCTTnT AATTGTGGTG TGAAATAAAC	60
10	ACCGAAATTC TTTTCAGATT CATCTTTTcC ACTACCTGCA TATAAAATAC CAATCAGTyC	120
15	ATGTTTAGAA TTCAATACAG GAGATCCTGA ATTACCTGGT TGTGCATACG CATCAAATTC	180
20	CATAAACGTT CCACTGATAT GGTTAATCGT TCCTGTCGAT TCAAACATTT TATATTTTGT	240
25	TTGTGCACCC TTTGGATAAC CAATAACAGA AATTCTATCT TTTCACTTTTG CTCCGTCCTGC	300
30	AAATTTTGTA TAACTAACGT TCTTATTAAA ATTCAAACCT TCTGTACTTG TTTCATGAAC	360
35	ATGAACTATC GCAAGGTCTT CTTTCCGGG ATATTCTACA ATGTCTTTAA CGTCGTAGTT	420
40	TCCTCCGCCT TTACCTTTAC TCGAATGATG TGCTGATACT CTATTTTTAA AAATATCATT	480
45	ACTTTTACCG ATATGTTTGT TAGTTACGAT TGTATTTTAA CCAACAATA CACCAGTACC	540
50	ACCCACAAAT GCTACCACTG aATTGTATGG TTCCTTAGTT GCATCGGTAA TTTCTTTGAC	600
55	ATTCTTTTCT GCTTTGGCAA TTGAATGArG CTGATTAGAA ATATTTTCAG CAAAACCAAG	660
60	AGATGTTAAA ATAGTTAAAG CAGTTAAACC TTTAACCATT ACATTTTAT TCATATTTTA	720
65	CCTCCTTCCA AATTTATTTT nATAGTTAAT GTATCTAGAT ACACATTTAC TATATACATT	780
70	TTAAATAAAA ATATTnATTA AATATTAATT AACCCTTAT nAACGTT	827

## (2) INFORMATION FOR SEQ ID NO: 602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 796 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 602:

50	nGGnACGTAA AGTATTTATG TTAAATGGCA nAAATATATG AATGATGAGT TACCTGGATT	60
55	ACCAATGTTC CAAGGTAAAT CGATAACTAT TGTTAACGAT AAAGTACGAA ACTTAGACAT	120

5 CGACGATTTT GTCGAGGTTT ACTTATATGG GGGGATGTTA TGAATAATGT ATTGTTAGAG 240  
 GTTAAAGATT TAGAAACATC ATTAAAAATA AATAATGAAT GGTTAGCAAC TGTTGAAAAT 300  
 10 ATTTCTTTTG AATTATCTAA AGGAGAAGTT TTGGGTATAG TAGGGGAATC TGGTTGCGGT 360  
 AAGTCCATAT TAAGTAAGTC AATTATTAAA TTATTACCAG AAAAGATATC TAAACTAAGT 420  
 AATGGAGAAG TTATATTGTA TGGTAAACGA ATCGATACGC TCAATGAGAA GCAATTGCTA 480  
 GATATTCGAG GAAATGATAT TGCTATGATT TTTCAAGAAC CTATGACTGC TTTAAATCCT 540  
 GTATTTACCA TAAAAAATCA ACTTGTGGAA TCTATAAAAT CACATAAAAA AATTTCTAAA 600  
 15 AAAGAAGCAA ATAAATTAGC AAAAGATTTA CTAaaaaaaAG TTGGAATTGC TAGACAAGAT 660  
 GAAATATTAA ATAGCTATCC TCATCAATTA TCTGGTGGTA TGAGACAAAG AGTAATGATT 720  
 GCAATGGCCA TTTCATGTTT TCcTAAATTA TTAATTGCTG aTGAACCTAC AACAGCATTG 780  
 20 GATGTCACGA TTCAAG 796

## (2) INFORMATION FOR SEQ ID NO: 603:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 603:

35 GGATGTGTTT ATCCCAAATT GaAAcAgAaA TTTATGATCA AAtGATGTGG ATTGGTTTTTA 60  
 AaCCATTCAa AATTaCCAAT ATTAmACAAG AATCTGAAGA CATTAAATCA TTTtACAGTT 120  
 GAAACTGAAG AATATGACTT TAGTGAATTT ACACCAGGCC AATACATCAC AGTTGATGTT 180  
 40 TCTAGTGATA AACTTCCATA TAGAGCTAAA CGTCACTATT CTATCGTATC AGGTGAAAAA 240  
 AACCATTTAA CTTTTGGCGT TAAACGTGAT GTCACAACAG AACATGAAGG CGAAGTTTCA 300  
 ACAATTTTAC ACGATGAGAT TAAAGAAGGC GATATGATTA ATTTAsTGCG CCTGTAGGTG 360  
 45 GATTTCGTATT AGAGAATACG ACTGAACCAC AACTTTTCTT AGGTTTCAGGT ATTGGTGTTA 420  
 CACCTTTAGT AGCTATGTAT GAAGCTGCCT CTGCCAAAGG TTTAGATACA CAGATGGTTC 480  
 AAGTTGCTGA AAATGAACAA CATTTACCTT TCAAAGACAA CTTCAACAGT ATCGCAAGCC 540  
 50 ATCATGACAA CGCTAAATTA TATACACACT TAnAgATAAA CAAGGCTATA TTGGTGCTGA 600  
 AGAATTACAA GTATTTTTAG CAAATAAACC TGAAATTTAT ATCTGTGGTG GTACAAAATT 660  
 55 CTTACAaTCT ATGATCGAAG CACTTAAATC TTAAATTAC GATATGGATC GCGTACACTA 720

	ATATGAAACT TAATCAACGT TACGTAAAAG TATTTGCATT ATATTTTCGTA AGTATTGTTA	840
	CTGCAAATAT TATTGTTHAA AATAATAATT TAATTAAAAC AtTGATACAA ACCATAGCCG	900
5	GGTACACGGT CTTTGCAGTT GGTITGAAGT ATTTAACTAA ACGTAAAAAT AAATGACATC	960
	TATACCAAAA CAGCTATGAC TTTACTTTGT CATGGCTGTT TTTTAATTGG GAGTAGGACA	1020
10	GAGATGATAT TTTTCGCAAAA TTTATTTGGT CGTCCCACCA CAACATGCAT TGATGTATGC	1080
	TCACTGAATT TCATAAGAAA GGAGTTCACA AGATGACCGT AGATATTGGA CGGATTTATG	1140
	ACAATAAAGA TAATACCGAC GCTATTCGTA TCCTAGTCGA TAGAGTCTGG CCGAGAGGTA	1200
15	TTTCGAAAAG AACTGCTAAC CTAGATTATT GGTTHAAAAGA CATTGCCCT TCTACTGAGT	1260
	TGCGACAATG GTTCCAACAT GATCCTAAAC TTTTGGAGC TTTTAAAGAA AAATATGAAA	1320
	AAGAATTACG TGATCAGGAT GCGCAAAAAG ATGCTTTTGA AAAATTAAAG GATATTGTAA	1380
20	ATCAGCATAA TCATGTTCTA TTGTTATATG CAGCAAAAAGA TACTAAACAT AACCAAGCTG	1440
	TAGTACTACA GCAGTTGCTC AATACTTAGT TATATATGTT TATCGTGAAT CACTATAAAT	1500
25	GTCGCTAACT TCATTTCTAA TATTTATTTT TAAAAAGCAT AATTACTACA ATTAATTGGA	1560
	ACTTTAATAA TTAATAAAT TGAACAATA TTTTACTTTA ACAAATAAA GTTTTAAA	1618.

## (2) INFORMATION FOR SEQ ID NO: 604:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2115 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 604:

40	ATTATAATGC AAATATTGAA GCATTTAAAA CAGTCGCTAA AGCAGTAGGC AAAGAGAAAG	60
	AAGGCGAGAA GCGTCTGGAA AAGCATGATA AAATATTAGC GGAGATTAGA AAGAAAATTG	120
	AACAGAGTAC GTTAAAATCT GCATTTGCAT TCGGTATCTC AAGAGCAGGT ATGTTTATTA	180
45	ATAATGAAGA TACATTTATG GGACAATTCT TAATTAAAAT GGGTATTCAA CCTGAAGtca	240
	mAAAArAmAA AACTACGCAT GTTGGTGAAC GCAAGGGTGG TCCTTATATA TATTTAAATA	300
	ATGAAGAACT TGCCAATATC AATCCAAAAG TTATGATTTT AGCCACTGAC GGAAAAACGG	360
50	ACAAAAATAG AACGAAATTC ATTGATCCTG CAGTTTGGAA ATCATTAAAA GCTGTGAAAG	420
	ATAACAAAGT TTATGACGTT GACCGAAATA AGTGGTTGAA ATCAAGGGGG ATTATCGCAA	480
55	GTGAAAGTAT GGCAGAAGAT TTAGAAAAAA TTGCAGAAAA AGCAAAATAA AAATACAGCG	540

	TGTGATGATT TACCTGAAAG TTTATTTTCGA ATAAATTTAA TTACATAACC GACAAGGATT	660
	GTTTTAACAG TTCTTTTAAT GAATTGGCGC ATCGTTACAT ACCTCATTTT TCTATATCTT	720
5	ACGAACTATA TACCCATTCA TATATGCTTT TTAACGTCA TTGTCACAAT TTAATTTTAA	780
	GGGAATATAA TATAACCATC TTTATCTGCT TTTT TAGTAA AAATGACAAA AATTGCATGT	840
	ATTATTGaGA TGATGGTAGG GATACCTGTC CAGAAAAATA ATAAGTGAAA AAGACCTTGT	900
10	CCAAATTTAT CAGCATAAAA TTTATGaATA CCTAACCTC CAAGAAATAA TGCAACmATa	960
	ACATAAATGG CTTTATTGAC TTTCATTTGT AAtCCTCCTT AACTATAATT CTACTTAAAT	1020
15	TCGTTGTGAA AACCAATATT TCTAACTTTA GAATTTTCAA ACTTTCTAAA ATTATAAGTA	1080
	TATCTTTTTTA AAATAAGCTA GAATTTCTAT ATAATAAATG TTAATAACGT AAAAGGGAAT	1140
	GATGACATAG TGATACGTCA AGCACGTCCA GAGGACCGAT TTGATATTGC GAAGTTAGTT	1200
20	TATATGGTTT GGGATGATAT GGAATTAGAA TTGGTAAAGC ATCTACCTAA AGACATGGTA	1260
	TTAGATGCAA TTGAAAAAAG CTGTGTTGAT GCAACATATC GAACTTTTTTA TCAGCATATT	1320
	TTAGTTTATG AAGTAGAAAA TAAAGTAGCA GGTTGTATTA TTAGCTATAG TGGTGAAAAAT	1380
25	GAATTGAAAT ACGAAAAAGC ATGGGAACTA CTTGACTTGC CAGAAAAAAT AAAACAATAT	1440
	GGCACGCCAT TACCTGTAAA AGAAGCTAAA GACGATGAGT ATTATATAGA AACCAATTGCG	1500
30	ACATTTGCAG CATATAGAGG TAGAGGCATC GCGACAAAGT TATTAACGTC ATTACTTGAA	1560
	TCAAATACAC ATGTTAAATG GAGTTTGAAT TGCGATATTA ATAATGAAGC AGCATTAAAG	1620
	TTATATAAAA AAGTAGGCTT TATATCTGAT GGACAGATTG AATTATACAA GCACATGTAT	1680
35	CATCATTTAA TTGTTAAATA AAATACTCGA CAGTTCGATG TAAGTCGATT GCCGAGTAGT	1740
	ATCATTTTCT ATTAAATGCC TGCAATAAT GCACTAATAT AAATACCTAA TGCATATAAT	1800
	AAACCGAAAA ATGTATTTGT TTTACCAGCA GCAGCCATTG CTGGCATCAT TGTAGGCGGT	1860
40	GTATCATTCT TCTTGAAACG TCTGATAACT TTAACAGGCA TTGGGAATGA TAACAACGCA	1920
	AGTAAGTAAA ATAATGAGCC ACCAGGTTTA ATAATGATCG TAAGTACAAT AAAGGCATAA	1980
45	GCGATAAAGT ACATGATTGC CATAAATGTT AAAGAAGCAT TTTTACCTAA TAGAATGGGT	2040
	AAAGTTTTGC GACCACTTGC TTTATCTTTG ACACGGTCGC GAATATTGTT AGCCATATTA	2100
	ATTAAACCGA TAGTG	2115

(2) INFORMATION FOR SEQ ID NO: 605:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1003 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 605:

5	TATGTCTCAA ACTCAAATTA ATCAAATGTT CCAGCAGAAA AACATGTCTA CTGAATTAAA	60
	ACGTCGTTAT GCACAACGTT TATTACAGTT TCCACATGTA CACAATAAAG AATACTTGAA	120
	ATCTTATGCT AAAAACCCCTA AAGAACTAA AGATAGTTAT ATTTCTGGTT TTAAAGAGAA	180
10	TCAATTGATT AAAATAGAAG CGATTAAATC ATTGTTTGCA ATGGATAAAT CTCCATTAGA	240
	ACATGTTAAA CCTGCTACAA AACCAGACGC TTCTTGGGAT GAGATGAAAC AAAAAGCAGT	300
	TGAAATTGGT AAAGCTGATA CTACATCGAA TAAATTTGGT ATTAGAGATC AATACTGGAA	360
15	ATTAATTCAA GAAAGTAAGC GTAAAGTTAG ACGTGACTAC GAATTCAATG TTAATTCTCC	420
	AGAATTCCAA GATTTAGAAT TACTTGTAAG AACAATGCGT GCTGCTGGTG CAGATGTTCA	480
20	ATATGTAAGT ATTCCATCAA ACGGTGTATG GTATGACCAC ATTGGTATCG ATAAAGAACC	540
	TCGTCAAGCA GTTTATAAAA AAATCCATTC TACTGTTGTA GATAATGGTG GTAAAATTTA	600
	CGATATGACT GATAAAGATT ATGAAAAATA TGTTATCAGT GATGCCGTAC ACATCGGTTG	660
25	GAAaGGTtGG GTTTATATGG ATGAGCmAAT TGCgAAACAT ATGAAAGGTG AACCACAACC	720
	TGAAGTAGAT AAACCTAAAA nTTAAAATAC AAATAGCACA TAACTCAACG ATTTTGATTG	780
30	AGCGTATGTG CTATTTTTAT ATTTTAAATT TCATAGAATA GAATAGTAAT ATGTGCTTGG	840
	ATATGTGGCA ATAATAAAAT AATTAATCAG ATAAaTAGTA TAAAATAACT TTCCCATCAG	900
	TCCAATTTGA CAGCGAAAAA AGACAGGTAA TAACTGATTA TAAATAATTC AGTATTCCTG	960
35	TCTTTGTTGT TATTCATAAT ATGTTCTGTT AACTTAATAT CTT	1003

## (2) INFORMATION FOR SEQ ID NO: 606:

## (i) SEQUENCE CHARACTERISTICS:

- |    |                             |
|----|-----------------------------|
| 40 | (A) LENGTH: 1097 base pairs |
|    | (B) TYPE: nucleic acid      |
|    | (C) STRANDEDNESS: double    |
|    | (D) TOPOLOGY: linear        |

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 606:

50	GCTnTTATAT TTAAAAAATT TATTnGCGGA TAATTACCTT TATTAAATCC CACCCATTAG	60
	GAwTaCGAGT AATAGGACTA ATACTGGAAT CACATAATGT AACATAACGT CCCTCCTTTA	120
	ACTTAATTTT AATTGTAATC AAATTTGACA ATAAGTCAAA mCATTAAATAC CTATGATArG	180
55	TATCATTTAT TAACATATGT ATCATATTTT TAATCTTGCG TAATTTTTAT CGTTAACTAT	240

CTTTTGTCAT TTAAATTATG TTAAGATAAT AGTAGTTATA GAAGTTCAAT CTATAGGAGG 360  
 CATAGCATGG ATATTCCAAA AATCACGACA TTTTAAATGT TTAATAACCA AGCTGAAGAA 420  
 5 GCTGTTAAAC TATACACAAG CTTATTTGAA GATAGTGAGA TTATAACAAT GGCTAAGTAT 480  
 GGTGAAAATG GACCTGGTGA TCCCGGGACT GTACAACACT CAATATTTAC ATTAAATGGA 540  
 10 CAAGTATTCA TGGCGATTGA TGCTAATAGT GGCACAGAAT TACCAATGAA TCCTGCGATT 600  
 TCATTATTTG TTACAGTAAA AGATACTATT GAAATGGAAC GACTATTTAA TGGATTAAAA 660  
 GATGAAGGTG CCATTTTAAT GCCAAAACG AATATGCCAC CATAAGAGA GTTTGCTTGG 720  
 15 GTTCAAGATA AGTTTGGAGT AAGTTTTCAA TTAGCATTAC CTGaGTAAAA GGATTCCGCAC 780  
 AGCtTGgAAT GATAAAGAAA CACTTTTTCT TATGCATGCG TTTTACCTAT GTATTTCTAT 840  
 TTTAAGTACA CATTAGCATT TTAGTTTCGC TCATTTTTAA AATCACAAAG ATAATTTGTA 900  
 20 ACTTAAATGA TGATACGTTA TTTAAAACA CGATACTTCG TTTCAATGAA CGCATTAAAT 960  
 AATAAATAAA CACCTCACCA TAAGAAAGGA CTACTTTCTT TTGTGAGGTG TTTatTTGTC 1020  
 25 GACAACTTGA TTATGATTGT TTCATTTTTT GAATAAGTTC ATAATCAGGT GTAGCATACA 1080  
 AAGTTTTTTG ATTGTCA 1097

## (2) INFORMATION FOR SEQ ID NO: 607:

- 30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2031 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 607:

40 GAGGTCTAGC ATGTCTCGTT CAAAAAATA CTTTTACTTA TCTAGCTTAA TGATTATTTT 60  
 AAGCTTTTTT TTTAATACAA ATAACGTTTT CCTAAGTGGA CTTTTTAATT CTTTATTAA 120  
 ATTAATACTT TTCTGCAGTG TTATTAATC AATTGTACTA ATTTTGTCTA TAATTTTTGC 180  
 45 AGATCGTTCA ATTAAATCAC TAAAGCCTGA TGCAGATTGG ATTAGAATTG CGAGTAAAAG 240  
 TTTGCCTTGG aTTATTCTAA TTGTTATTTT AGTACATATC TTTTCAATTG TTCGTACATT 300  
 CGGTTTTATT TAAAAAGTT AATATGTCAT TGTAGCCTTA ATACAAAACA ATACAATGTA 360  
 50 TCATGCTATA ATGAGTAAAA CAATTTGATA ACGTTGTTGC GTATAAAAAA TATTAGATTT 420  
 TCGAAATCAT AACTATGCAT CTAATCGCTA TAGTTATACA ACAAGATATA ACATATAATG 480  
 55 AGGTTTGATA ATGCATCGAC AATTTTTGTC GTCGCGTTGC CAAACCTCT TTTTAAATT 540

	TTTAGGCGCT TTATTACGTT ACCTCATTTC TTTTCTGAAT ACTGACGGAG GTTTTCCAAT	660
	CGGAACACTG ATAGCCAATT TGACTGGTGC CTTTGTAATG GGATTGCTAA CAGCCTTAAC	720
5	AATTGCATTT TTTTCAAACC ATCCGACCCT AAAAAAGCT ATTACGACTG GTTTTCTTGG	780
	TGCTTTAACG ACTTTTTCAA CATTTCAATT AGAATTAATA CATATGTTTG ATCATCAACA	840
10	ATTTATAACT TTACTACTAT ATGCTGTAAC AAGTTATGTC TTTGGTATTT TGTTATGTTA	900
	CGTCGGTATA AAAC TAGGTG GTGGTTTATC ATGATATCAA TCATTTTAGT CATGATTGGC	960
	GGCGGTTTTG GCGCAATTGC TAGAAGTGCC ATTACTGATT ATTTTAATCA TAAATTTACT	1020
15	TCAAAGTTAC CTATCGCAAC ATTGATAGTA AATCTAGTTG GTAGTTTTTT AATTGGATTA	1080
	ACTATAGGCT TATCAATTTT AATCTCATGG TTCCCTGCGT TCTTTGTTAC CGGTTTTTTA	1140
	GGTGGCTTAA CAACTTTCTC AACGTTAGCC AAAGAACTTA CACTAATGAT GACGCCAAAA	1200
20	TTTAATATTA ACCTTTTTCT CAATTATTCA CTTTTACAAT TCATCATTGG ATTTATAGCT	1260
	TGTTATATTG GCTATCATAT TAAAAATAA AATGCTTCAT TCAGCAAATA GGTAAATTAC	1320
25	GACACCTTCC TGAACGAAGC ATTTTTTAAT TTTCATGCAA ATTTTAAAGC ACCATATAAT	1380
	GCCTACCAA TTTCAATAAT CTTTGTGCGC GTTTAAATAA TGTGAATGTC AATAAATTCT	1440
	CCAACTAGT CGAAAATAAA GGGAGTGCGA CATAAATCCC TAAAAAACA GCAGTAAGAT	1500
30	AATTTTCAAT TAGAAAATAT CTTACTGCTG TTCTCTATTT ATACAATACT TCGTATTGAA	1560
	TGGCTTCGCT TTCCTAGGGT GCCGTCTCAG CCTCGGCTTC GACTGGCACT GCTCCCTCAG	1620
	GAGTCTCGCC ATTAATACTA CGTATTAACA TGTAATTTTA CTTTACATA CTTTAAAAAA	1680
35	TAAGACACTT TGCCCAACTT AACTACCAA TAGAAACCTC TGTTAGAATT CCTCAAAATG	1740
	ATATTTTCGCG ATATGTTAAT GAAATTGTTG AAACGATACC TGATAGCGAA TTCGATGAAT	1800
40	TCAGACATCA TCGTGGCGCA ACATCCTATC ATCCAAAAAT GATGTTAAAA ATCATCTTAT	1860
	ATGCATATAC TCAATCTGTA TTTTCTGGTC GAAGAATAGA GAAATTACTT CATGACAGTA	1920
	TTCGAATGAT GTGGTTAGCT CAAAATCAAA CACCTTCTTA TAAACTATT AATCGTTTTA	1980
45	GAGTGAATCC TAATACTGAT GCGTTAATTG AATCTTTATT TATTCAGTTC C	2031

(2) INFORMATION FOR SEQ ID NO: 608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCCCCGGGAA TCGAACCCGC GAnCTCCTGC GTGACATGCA GGC GTGTAA CCGCTACACT 60  
 ACGAGACCTA TTAnATTAAA AACTATGTAT TGCGGGAGGC GGATTTGAAC CACCGACCTT 120  
 5 CGGGTATGA GCCCGACGAG CTACCGAACT GCTCCATCCC GCGCTAATAT TATTTTGAAT 180  
 TACCTAATTA ATATACCATA ATCAAAAACC TAAAGTsrrG AACTTTTTGA ATTTAATTTA 240  
 AATGTTATCT CTAAATAAT TACTTAAATA TCGTAGCAAC ATGTTCTCTG TTGAACACAA 300  
 10 ATATTAGTAT ATTCATTTTT GTAGTGACG TCAACGACAT TTCAAAGTT TTTTGTGTAA 360  
 AAAAACGCTT CTATTCCCT TTTATCATAT AAGTGTCTAA TAGTTGTCAT AAATAGTGKT 420  
 15 AAAGCATTTA AAAAGGTATA GGAGTTATAA AGTTTACAAC GCCTATACCT TCTGAAAAAG 480  
 AAATTATAAA AGCTTGTTAC ACCGCATATT CTTTCAGTCA GCGACTACCA ATATAACATT 540  
 GTAGCCCTAA GACATTGCTT GACGCCTCAn TTACAACAAT TTTTCAAAT CAGCAGCTAC 600  
 20 CTACTGACAC AACATAACAC AACCCTnTACA CTAnCTATCG TGTCATGTAA TCTTGCATCC 660  
 GATCTTGCAA CGCTGTAAAT GTTTCGA 687

(2) INFORMATION FOR SEQ ID NO: 609:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 843 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 609:

35 GTGTTGAATA CTTTGACAAA ATGAAATCAT TTGTTCTTTC GTTTCAAATT TAACTGTTTG 60  
 AATTAAATCA GTTCGTTTTT CGTAGTACTT CGGCGTTGTG TTCATATTCA TTTTCTCTAA 120  
 AAATAAACTA GTAAACAATG CACCTTTAAG ACTCTGACTG ACAACGTGTG GTGCTAAAAA 180  
 40 GAAACCTTGA TACATTTCAA GCAATGCATT TAATGATGCA CCCGCTTCTT TACCAATACC 240  
 AGGTGCTGTC AATCTATAAC CACATCGTTC AATTAAATCT TTTCTACCAG CAATGTATCC 300  
 45 ACCAATCTTA GCTAAACCAC CGCCAGGGTT TTTAATTAAT GATCCTGCTA TTAAATCGGC 360  
 ACCACATTCT ATAGGTTTAC GTCTTTCAAC AAATTCCCCA TAACAGTTAT CCACAAATAT 420  
 TAAAATATTA GGATGCACGT TTTTCAACCT AGTAATTACC TTTTCAATTT CATCTAGCGG 480  
 50 AATTGAAGGT CTTTGATCAT AGCCTTTTGA ACGTTGAATC GCTATTACTT TGGTGCGCTC 540  
 AGAAACCCCa TCTAACACAC TTTCAATATC GATCTTACCT TCTTTAAGTG CAATATCTTT 600  
 55 ATACGATmCG CCATGCTCCA TTAAACTTTC AATACCATT TCCGTTTACGC CAATGACTTC 660

ACTTTGTAAT GCAATAGTAA TCGCATGCGT ACCTGAAATA ATTTGCGGAC GAACAATTGC 780  
 ATCTTCTGCT TTAAATGCCT GCGCATATAT TTCTTAATTG AACGAATTTA GAACTAATCG 840  
 TAA 843

(2) INFORMATION FOR SEQ ID NO: 610:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 610:

GATTATTATA AACCGAATGA AACAAAAAAG TTTTACATA TTTTCAACAA CTTTATTTCA 60  
 ATAAAGCATC AAGTTGATCT AAAGTTTGAT TCATACCTTG TTCAACACCC ATGTTTATGA 120  
 CTTGTTGAGC GGCTTCTTTT GTTGGAATA CCGATGTTGA TGTCACGTGC GTTTTCGTTG 180  
 TATTGCTCTT GGAAAATGAC AAAGTAATTT TCATGCTTGG CATTTTGTGA TCTTTGCAC 240  
 CTTGAGGTGT CGCAAATGAG TCAATATATT CAATTAAATA TGGACGCTTA ACCGTTTTAT 300  
 ATTCTGCTAA TGTATAGCTG GTCATTGTAG GTGTTTTAAT CGCATAAAAT GCATCACC GC 360  
 CTGAAACAGC ATTAAAGCGA AACACTTTGG TACTAGCGTC TTTTGGATGA AACCATTTTT 420  
 CAAATAATGC TTTkGTCGTA TAGGCATCAA ACACCTTTTC AATCGGTGCT TCTATCGTTC 480  
 TTGAAAAAAT AATTTTATTA TCTTCAACTT TAATCGTCAT CTTCCCACTC CCTATCTTTT 540  
 ATATTTACTC ATCTTAACAT GCATTGAGTA ACATATGTTA CCAAATCATT TGTTATAAAC 600  
 TATAGTAATA TTAATCATTC CCTCTGTnGA AATTGATAAC TACGAAATAA AAAACACACT 660  
 CTATTCAGCT ATTAACAGTT GAGTAGAGTG TGCAAACCTG TTGAATTAAT GCGCTAACAT 720  
 TTCTTCTTTG ATTTGGTCTT nATnTAATTT TGAAGGATAA TATGTTGGCC AGTTA 775

(2) INFORMATION FOR SEQ ID NO: 611:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 728 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 611:

ATCAAAATTT GATACTAAAG GGCTCAGCT ATTTTATGTA TTTATTGGAT TGATTATGTT 60

TGTGGCAATG TGTTTATTTA AAGTAGAAAA ACATGTTTCT TCACCATTTT TACCTGTGGT 180  
 TGAATTTAAT CGTTCGATTA CTTTAGTTTT TATAACTGAC CTTCTAACAG CTATTTGTTT 240  
 5 AATGGGATTC AATTTATATA TTCCAGTCTA CCTTCAAGAA CAACTAGGAT TATCTCCATT 300  
 GCAAAGTGGA TTGGTTATTT TTCCTTTATC TGTAGCTTGG ATTACATTGA ATTTTAATTT 360  
 ACaTCGAATT GAAGCAAAAC TATCAAGGAA AGTTATTTAC TTACTIONCAT TTACATTGCT 420  
 10 ACTAGTAAGT AGTATTATCA TTTCATTTGG TATTAAATTG CCGGTACTTA TAGCATTGTG 480  
 GTTAATTTTG GCAGGATTAA GTTTTGGATA TATTTATACG AAAGATAGTG TGATTGTCCA 540  
 AGAGGAAACT AGCCCATTAC AAATGAAGAA AATGATGTCA TTTTATGGAT TAACTAAAAA 600  
 15 TCTTGGGGCA TCAATAGGTT CAACAATAAT GGGATATCTT TATGCGATAC AATCAGGAAT 660  
 CTTTGGTCCA AACTTACACA NTGTGTTAAG TGCTGTTGCT GTAATTAGCA TGGGCTTATN 720  
 20 GTTTTATG 728

(2) INFORMATION FOR SEQ ID NO: 612:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 913 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 612:

TATCAGAGCA AATAAGCAAG TTAGATAAAA AGATTTCTGA CTTACAATTA ATTAGACGCT 60  
 35 CTGTATGTGA ATTTATTAAA GGACTCTCTC TAATAGATAC CAGCATTTTA AACAAGACAC 120  
 TACAGTCACA ATATGATAAA GAAGCATCTA TAAAATATGG TCATACGAAA GCATATCANT 180  
 CATTIATTAG ACGTAAAGAC AGCTTACAAT CGCAGGATAT CAGACATAAA TTGACAACTA 240  
 40 TCTTCAATAA ATTTAATCAT ATGTCTTTGA GTCATTATCC AATCCAAGAT TGTAGTGATC 300  
 TCGTATTTGA GTGGAAGGCA TTTATGAACA CTATCGCTGA TTTTGmTGAT GAAACATTAT 360  
 45 GCTGTATTGC TAAAACATAT GAAGATGATA CGCGTTTCAA AGATTACTTT AATTCATATG 420  
 ATAATCAAAA TTTAGCATCA TACATTTAG AAGCTGTTAA TTATTTTTTG AGCAATGTGA 480  
 ATAAGAGCGA CAATTTTTAA TCCTCATACA GATGCTACAA CACTGAATAC ACCAACTAAA 540  
 50 ATAATTGTTC AAAGTAGAAA ACTAATCATT TATTCTCTAA ATCAATAACT ATATTAAAAG 600  
 TTATACCTTT GCAAAGCGAA TTAGTATAGG TTACCGAAAG GAGAAAGGAT TAGGTTCCAT 660  
 55 TCGATTTATA AAAAAATATA TTTCGAAACA TACAAAAGCG CCAGAAGATA ATCATTTCCT 720

TCAATGCATA TTCAACTAGC TCAGGTTTAC TCTTTAAGCC AAGCTTTGTC ATAATATGCG 840  
 TCTTATGTGC TTCTACTGTT TTCACAGATA CAAATAATTT CTCTGCAATT tCTTTATTCC 900  
 CGTAACCTTT GGC 913

(2) INFORMATION FOR SEQ ID NO: 613:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 613:

ACAAGTGTTG ATGTCATAGT AGCGTCAAAT GTGCTTTATT TCTGGGACAC ATTTAAATTT 60  
 TTCCACCCCA TTAAGTGGAG CTTAATCTTT ATTACAATTT TACTATTATT AAACATTTT 120  
 TCTGTAAAT CATTGGAGA AACTGAGTTT TGGTTATCAT TGATTAAAGT GTTAACAATT 180  
 ATCGTATTCG TTATTTTGG CTTTTAATG ATTTTCGGTA TCTTAGGTGG TCATACATAT 240  
 GGATTTGAAA ACTATACAAA AGGCCAAGCA CCGTTTGTG GTGGTATCTC TGGTTTCTTA 300  
 GGCGTATTAT TAGTCGCCGG ATTTTCGGTT GGTGGTACAG AAGTAGTAGC AGTAACTGCT 360  
 GGTGAATCAG ATGACCCTAA AAAGTCTATG CCTAAGGCAA TTAAACAAGT ATTTTGGCGT 420  
 ATTCTTTTAT TCTATGTCTT ATCAATTGCA GTAATTGGTG CAATTATTCC GTACACAGAT 480  
 CCATCATTAT TAAGAGCAAG TAGTTCAATA AGTCAAAGCC CATTACAAT TGTATTGAT 540  
 AGAGTAGCA TAGCCTTGC AGCATCAGTA ATCAACGCGG TTATTTTAAC TTCATTATTA 600  
 TCCGCTGCAA ATTCAGGTGT TTATACAACA GGCAGAATGT TGTATTCCTT AAGT 654

(2) INFORMATION FOR SEQ ID NO: 614:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 642 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 614:

TCGATCTTTA TTGATAATAA TTAAATTGTC GCCTTTAAAA TGTGATATTA ATCCTGCGGC 60  
 AGGnTGTA ACGAGTGATG AACCTAGTAC AACAAGGGTG TCAGCATGTT CAATTTTATT 120  
 TAATGCCCTT ATGATGGTAG GTTGATCTAA CATTTACCG TATAATACGA TGTCCGGTCG 180

ATAAGATTTA TGACATACAT TACAATAAAA ACGATTTAAC GTGCCATGTA ATTCATCAAC 300  
 ATGTTGACTT CCAGCGTCTG AGTGCAAACC ATCGATATTT TCGTGATGA CACCTAAAGA 360  
 5 TTGTTGATTA CGTTCTAATT TTGCAATCCA ATCATGAACG ATATTGGGCA TCGTATCGAC 420  
 AAATAGTAAG CGCTTATGGC AGAAATTGAT AAAACCTTCA GGATCATCTT CTAAATAATC 480  
 ACGGCTTAAC AAGTATTCTG GCGAAAGCCC ATCTTTTGaA ATTCATCAA ATAAGCCACC 540  
 10 CATTGaACGG AAATCTGGAA CGCCACTTGC GACAGATACA CCAGCACCTG TAAAAAATGT 600  
 AATACGATTC GAACTATCTA TAATATGTTT TAGTGTCTCT AA 642

(2) INFORMATION FOR SEQ ID NO: 615:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 615:

TTTCCCCnCC CcncCAAATA TCCAaNGGAA CTtTAATAGT CCAATTGGCA CAGTAAAACT 60  
 ATGGCATTtTT ATAAGTATAA TATATCTGTA ATTTATGGTC AATTAGTAAA TTGTTTTTTA 120  
 30 TTGAAACAT ATTCACATc AAAATCACAA AGACTTTTAG ATTTTGtTCT AAAAATCTCT 180  
 TAATAATTTA TTAAATGAGA AGAGTTGCTT ATATAGTAAA TTGTGAAGCC GTTAAACAA 240  
 CGTTACAAAA CCTATATCTT TAATACGGAA CCATATGGTA TGAATCAAGG AATACTTAAA 300  
 35 CTAAAACTTC TCTATCAGAT TTATTTGTTG CGAAATCAAC AACTTTAATT GCTTGCCCTT 360  
 CATTTAATGG ATAATTTGCT TCGTAATTT TAACTTTTAC AATTTGACCT ATGAGTGATT 420  
 CGTCACCTTC AAATTGTACT TTCATATAAT TATCTGCATA TCCAATAAT GTACCTTCTG 480  
 40 TGtCACCCCTG TTCCTCAGGA ATTACTTCAA GCACATCTTG ATCAAATTTA GACGCATATA 540  
 ACTTTCCGAG TTGATTGCTT AGCGTAATTA ACTTATGCAC CCGTTCATT TTAATTTCTT 600  
 CATCAATTTG GTCATCCATT CTGCGAGCTG GCGTGCCAAT TCTAGGAGAA TAAGGGAAAA 660  
 45 CATGCAGTTC AGAGAACTTA TGCTTTACGA TAAATCATA TGTTTCTTGG AACTCAGCTT 720  
 CAGTTTCACC TGGGAAACCA ACAATTACAT CACTCGTAay TGCCAAGTCT GGTAAAGCTT 780  
 50 TATGCAATTT TGTTAATCGT TCTGAAAATC TATCCATTGT ATACTTACGT CTCATACGTT 840  
 TTAATACTGT ATCTGAACCA GATTGTAATG GAATATGCAA ATGACGCACA ACTTTTGTTG 900  
 AACGTTCTAA AACGTCAATT ACTTCATCTG TAAGTTGACT TGCTTCAATT GAAGAAATTC 960



CTTTTAAATC TTGACCATAT CCACCTGTAT GAATTCCTCGT CAATACAATT TCCTTATATC 1080  
 CTGAATTCAC TAGTTGCGTC GCTTGTTCAA CTACTTTTTC CGGATCTCTT GAACGCATTA 1140  
 AGCCACGAGC CCATGGAATA ATACAGAATG TGCAGAAGTT GTTACAACCT TCTTGAATTT 1200  
 TTAATGACGC 1210

(2) INFORMATION FOR SEQ ID NO: 616:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 652 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 616:

TAATAAAATA CAATACTTTT CAATACAGAG AATCCCGCAA TGTCGGGATT CTTATTTATG 60  
 CTGATTTTGT TTTTGTCTAT GATCAGGGAC TTtCAGGGAC TCAATTAATT ATCACATTCA 120  
 TATTTTCTTA TGACCAAATT GATACATATG ATGCTATTTA ATGAGAAAAT TAGGCATCAC 180  
 TTGGTTATTG AATTTCTTTC ATTAACTTT CCAGCTCAAT TTAATAGTTA GTCGACTATT 240  
 ATTCATTAAA CACTTTTTTAA TCATAAAAAA GTGTTTTTga TAATTCACta CCaAAAACAC 300  
 CTTCTTACTT ATAATTCTAT TTGTTACCA TTTCTAATCT TATCGGCTAA ATCATTCACT 360  
 TTTCTTAATC GGTGATTTAC ACCTGATTTT GAAATTGGAC CAGTTGATAC CATTTCTCCA 420  
 AGCTCTTTCA ACGAAATTTT TTGATGTTCT ACTCGAATTC TAGCAATCTC TCTCAACCTG 480  
 TCTGGTAAAT TTTCAATACC AATTTCTTTA TCAATCAATT TAATGCTCTC AACTTGTTTC 540  
 ATCGCAGCAC TAACTGTTTT ATTTAGATTG GcCGTTTCAC AATTAACGAG TCGGTAAACA 600  
 GAATTACGCA TATCTCTTAC AATACGTACG TCTTCAAATT TTAATAACGC TT 652

(2) INFORMATION FOR SEQ ID NO: 617:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 617:

TnACCACTTT AAAATAGCGC TTAATAAAAt AAGGGGGCAA GTCTTATGAC GtTTTACaAT 60  
 TTCATCaTGG GTTTTCAAAA TGtTAACACA CCATTGGTA TATTGGCCGa ACACGTTAGT 120

TCTAATTACA CAGATCATCA ATTAATTGAA ACTACAAATA GAGCTATTAG CTTATATATG 240  
 GCAAATTAAT TTGAGTAGTA CCAATTATGA TGTATTAGTG CATCCCAAAT ATCTTTTGTT 300  
 5 TTAAAGTTTA TTTCATCATT TCTTATCGAA AATGGTGTA TAATGTCTTT ATCTAACCAA 360  
 GTGTTGATAA GTTCATTG G TACACCATCT AACACATTT CACTTTTACT AATTATAAAA 420  
 CATTCCCGAGT CAAGTGAAAC ATTTTGTGGA TTCACATAAT TACATTGATT ATGATTATCC 480  
 10 ATAAACACTC ACTCCTTTAA AATTCTGTAC TCTTCATTGC GTTTTACCCC GTCACATTAT 540  
 CTTTTAAACT AAAATCATCA TTAATTATGA AAAAAATGTA CATCAAAAGC AAAGGTTTTC 600  
 GCTACCGAAA AAGTTTAAAT AATGGTttaa TATATtGGT ACTCATTTTA ATAAAAAGAG 660  
 15 AATACATTTT GAGCTATCAA TACTTTTTAT TGAAGAGGTG TTATTsyTGG CTAAAACGTT 720  
 ATATTTAATG CGCCACGGAC AACTTTGTT TAATTTTAAG GGAATAATTc AGGGATTG 780  
 20 AGATTGCGCG CTAACAGA 798

(2) INFORMATION FOR SEQ ID NO: 618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1786 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 618:

ATACGCTCAA TTGATAAAAA TTTAATATCT GCCATTGTA TACGCATCGC TTCGAATGTT 60  
 35 TCCGTTGCAA TATCAAATGA TAATTGTGAC TGGAACCTTA AACATCGAAT CATACGTAAA 120  
 GCATCTTCTT GGAATCGTTC CTCAGCTATA CCTACAGTTC TTATTATTCTG ATTATTAATA 180  
 TCTTGTTGAC CATCAAAATA ATCATACAAT TTGTATGCTG TATCCATTGC TATCGCATT 240  
 40 ATCGTGAAAT CTCGTCGTTG CAAATCTTCG TATAAATCAC GAACAAATGT AACACCACTT 300  
 GGTCTACGGT GATCGACATA ATCTTCTTCA GCCCGGAATG TTGTCACTTC ATAATTTtCA 360  
 45 TCATtAAAAa CTACATTtAT CGTGCCAtGT yCTTnACCTA CAGGTATCGT ATGACTAAAG 420  
 ATAGATTCTA TTTCATCCGG CGTTGCACTT GTTGTGATAT CTATATCATG AATATTTCTT 480  
 CCCATGACAT AATCTCTTAC AGAGCCACCT ACATAATATG CTTCAAAACC ATTGTCTTGA 540  
 50 ATTTGTTCTA ATATAGGCCT TGCCTGTTCA AATAATGATT TATCCATATT ATTACTCGCC 600  
 TTTACTTTTG TTATGCTCAT TTAGCATTTT TTGATAATAA TACTCATATT GATCTGTAAT 660  
 55 AAGTTCTGAT CCAAAACGTT CAGCAATATC TGCTAGCATG TTTTCTGAA GTTGTGTTGA 720

ATCTACGACA AATCCAGTTT CACCATGTTT AATAACCTCT TTAATTCCAC CGGCATTGTA 840  
 ACCAATTGGA ACGACGCCTG TWTTTCATAGC CTCAAGTAAA GTTAGTCCAA AGCTTTCTTT 900  
 5 TTCACTTAAT AATAATACTA AGTCAGATAA TTGGTAAAAT TCACTTACGC AATCTTGTTT 960  
 CCCTAAAAAT AAAACATCCT CTTCTACGTT TAACTCTTTC GTCAATTGAC GCATTGGCAC 1020  
 10 TAATTCAGGA CCATCTCCAA GTAAAATTAA TTTACTAGGT ATCTTTTCAC GTACTTTTGC 1080  
 AAATGTTTCT ATAATAGTAT CTATGCGTTT TACTTGTCTA AAATTGATA CATGTATTAA 1140  
 CACTTTTCA TCTGGTGCTA TACCAAATTG TGATTTAAT GCTGTGTTAT GTTTAGTTGG 1200  
 15 AAATCATTTC TCACGTACAA AATTATAAAT CGGTATAATT TCTTTGTTAG TTTCAATAAT 1260  
 TTCATGTGTT TCTTGTGCTA AAGATTTACT CACACTTGTC ACAATATCAC TTTTTTCAAT 1320  
 GCCAAATTTA ATTGCACCTT GGAGTGAATG ATCATAGCCC AAAACAGTAA TATCAGTACC 1380  
 20 GTGTAGCGTT GTCATAATTT TTATATCTTT ACCTGACATC TCACGAGCTA AAATCCCACA 1440  
 AATTGCATGA GGTACAGCAT AGTGCATATG CAACAAATCA AGATCATATT CTTTAATAAC 1500  
 25 TTCAGCGATT TTAGTACTTA ACGTAATATC ATACGGTGGA TACTGAAATA CTGCATATTG 1560  
 ATTCATTCA ACTTGATGAA AAATCATATT CGGTAATGGT TTTCTTATTC TAAACGGGAT 1620  
 ATTTGAAGTG ATAAAATGTA CTTCTGTACC TCGCTCTGCT AATTTAATTC CTAATTCTGT 1680  
 30 GGCAATAATT CCAGAACCAC CCATGGACGG GTAACATGTT ATACCTATCn TCATTGCTT 1740  
 GCCCATCCTT TCTTTCTATT TCTCnCTATG ATnCTCGATG CGTAGA 1786

(2) INFORMATION FOR SEQ ID NO: 619:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 844 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 619:

45 ACAGGTATGG ACTTnGCTCA AATGACACGA CATTATTTAT CAAGACCTAT TGCTATAATC 60  
 TTTTGGATCA TTGCAGAACT AGCAATTATC GCTACAGATA TTGCTGAGGT TATTGGTAGT 120  
 GCTATTGCTC TTAATCTCCT ATTTAACATA CCTTTAATCG TCGGTGCACT AATAACTGTA 180  
 50 CTTGATGTAT TTTTACTACT TTTTATAATG AAATATGGTT TTAGAAAAAT TGAAGCTATT 240  
 GTTGGTACAT TAATTTTCAC AGTGTTATTC ATCTTTATAT TTGAAGTCTA TATTTTCATCA 300  
 55 CCACAGTTGA ATGCTGTGTT AAATGGATTT ATACCACATA GTGAAATCAT TACAAATAAC 360

TTACATTCAT CAATTGTACA ATCTAGAACA TACTCAAGAC ATAACAATGA AGAAAAAGCG 480  
 CAAGGaTTAA ATTTGCTACG ATAGATTCGA ACATTCAGTT ATCAATCGCA TTTGTAGTCA 540  
 5 ATTGCTTATT ATTAGTGTaTA GGAGCATCAC TATTTTtCAA CTCAAATGCT GACGATTTAG 600  
 GTGGTTTCTA TGATTTATAT CACGCCTTAA AAActGAACC TGTACTAGGT GCAACAATGG 660  
 GTGCAATCAT GAGTACATTA TTTGCAGTTG CATTATTAGC GTCAGGTCAA AATTCAACGA 720  
 10 TTAActGGTAC TTTAGCAGGA CAAATTGTAA TGGAAGGATT TTTAAGATTA CACATACCAA 780  
 ATTGGTTAAG ACGTTTAATT ACACGTtCTC TTGCTGTcAT TCCTGTTATC GTATGCTTAA 840  
 15 TCAT 844

## (2) INFORMATION FOR SEQ ID NO: 620:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 574 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 620:

TGTATTGCAG TCATGCCATA AATTTTTTTGA ATAATAAACG GAGACGCAGA AATATAAGTA 60  
 AATAATATTA CAAATGTCAT ACCTTGGAAT GAGCATTGGT AATACAAAAC GTGGCGTCTT 120  
 30 CAaTAATATT TTGAAGTTTT TAAACATTGT CTTTAaTCCA CTACTTGACT CACGATTTGT 180  
 CACTGTTAAT GATTcAGGTA CTTTTAATAA AGAACCTATG ACCATGACGA AGCCAAAGAT 240  
 35 AGTCAGAATG ACAAAGACCA TACGCCAGAC AGAATAATTT AAAATTATGC CCCCTATTGT 300  
 TGGCGCAACA ACTGGTGCAA TACCATTAAc AAGCATCAAT AATGCCATAA ACTTAGTTAG 360  
 TTCATTACCA CTATACATAT CACTTGCTAT AGCTCTTGAA ATAActGCTG tGCGCCACCT 420  
 40 GTCACTCCTT GAAGaAATCT TAATGCAACC ATCAGCCAAA TATTATGTAC AAAACAATA 480  
 CCTAAACTTG CTAATGTAAA AATAATCATA GCTATAATAA GCGGCTTTCT GCGCCcAGTT 540  
 45 GAATCTGAAA TTGGACnAGC AACCAAATTA CCAA 574

## (2) INFORMATION FOR SEQ ID NO: 621:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 523 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

AAGCAAGAGA GAGTACAACA TTTATATGAT ATTAAAGACT TACATCGATA CTA<sup>CTCATCA</sup> 60  
 5 GAAAGTTT<sup>TG</sup> AATTCAGTAA TATTAGTGGT AAGGTTGAAA ATTATAACGG TTCTAACGTT 120  
 GTACGCTTTA ACCAAGAAAA TCAAAATCAC CAATTATTCT TATTAGGTAA AGATAAAGAG 180  
 AAATATAAAG AAGGCATTGA AGGCAAAGAT GTCTTTGTGG TAAAAGAATT AATTGATCCA 240  
 10 AACGGTAGAT TATCTACTGT TGGTGGTGTG ACTAAGAAAA ATAACAAATC TTCTGAAACT 300  
 AATACACATT TATTGTGTTAA TAAAGTGTAT GGCGGAAATT TAGATGCATC AATTGACTCA 360  
 TTTTCAATTA ATAAAGAAGA AGTTTCACTG AAAGAACTTG aTTTCAAAAT TAGACAACAT 420  
 15 TTAGTTAAAA ATTATGGTTT ATATAAAGGT ACGACTAAAT ACGGTAAGaT CACTATCAAT 480  
 TTGAAAGATG GAGAAAAGCA AGAAATTGAT TTAGGTGATA AAT 523

(2) INFORMATION FOR SEQ ID NO: 622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1871 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 622:

30 AGAAGTGTGA nAAAAATTTA AnAGAGATAT GCACATAGAT GACGCATTGC TATATCCAAG 60  
 CAATTGAGAA AGCTGCTGAT GCTCCAAATC aCGGAATGAG GGAACCATGG AGAGTTGTGC 120  
 35 ATGTTCCGAA AGACAGATTA GGAGATATGA GTAAGGATAT TTCTAAATTT GCATTTCTTA 180  
 ATGAATTAGA TAAGCAACAA TGTCATTATG ATGCAGTTAC GAAACTAGGT GGCATGTTAT 240  
 TGCTTATTTT AAAAACAGAT CCAAGACAAC GTCAAAATGA TGAAAACTAC TTTGCATTTG 300  
 40 tGCATATGCA CAAATCTTA TGTTGTTACT TTATGAAGCG GGAATAGGTA CATGTTGGAA 360  
 aTCGCCATTA TATATCTATG ATCCTAAAGT AAGnAAACAC TTGGTATAAA GnAAGATGAA 420  
 GTTCTTGCTG GATTCTTATA TTAAACGGAT TTAGAAGnAG ATATGCCTAA AGCACCACGT 480  
 45 AAAAATAGAA ACTTAATTAC ATTATATTAA TATGTATAAT TATAGAAACA TTAATAAAAG 540  
 CTGAGTCATG AATTGATGGA CATCTATCGA GTTAGAGATT TAATCTAACT TACTAGAGTC 600  
 50 GGTACAATAA CAGTCTCAGC TTTTATTGT GCAGTATATA CACATTTT<sup>TTA</sup> TTTTAGTATT 660  
 TATTtAAAAG TTtCTGCTaA AAATGATTCA ACTTGTT<sup>CAG</sup> GTGACTTAGC ATTTGCTGAA 720  
 TGAAGGTGTG CAATTTTATC GCCGTTTTTA AATACTAGCA AGCTAGGGAT ACCCATAACT 780  
 55 TCATTTTCAA CAACTACATC TTCTAATTCA TCACGATTAA CAGTATACCA TTGGTAATCA 840

5 CCTGCCTCAA ATTAAACAAT TACAGGTGTA TCGCTATTAA TTACAGATTT AAATGATTCA 960  
 TTACTTTTGA TTGATTGCAT TGTAACAACT CCTCTAGATA GTTTAATAAT TTTTATTATA 1020  
 10 GCTAAATTTA TATCATAATA AAAAATTTTA GCTTCAAAAT GAAAGCCTTT TGCTTTGGAA 1080  
 AATGATATAT TTATTTTAAA TACATAAAGG AGGTTGCAGT CGTATGATTA AATTTTACCA 1140  
 ATATAAGAAT TGTACAACCT GTAAAAAGGC AGCAAAGTTT TTAGATGAAT aTGGCGTAAG 1200  
 15 TTATGAACCA ATTGATATCG TTCAACATAC ACCTACAATA AATGAATTTA AAACAATAAT 1260  
 TGCAAATACA GGCCTAGAAA TTAATAAATT GTTTAATACA CACGGCGCGA AATATCGTGA 1320  
 GCTTGATTG AAAAATAAAT TACAACTTT ATCAGATGAT GAAAAGTTAG AGTTGTTATC 1380  
 ATCTGATGGT ATGTTAGTAA AGCGTCCTCT AGCAGTAATG GGCGATAAGA TAACATTAGG 1440  
 ATTTAAAGAA GATCAATATA AAGAGACTTG GTTAGCGTAA GTGaAATGTA AGCGTTTACT 1500  
 20 AAATATCTCG ATATTTAGAT TCATTACATG TAAATGAAA TAAGCTATAC AATTGTTAAT 1560  
 TTTTATAAAT ATAGTTGAAT AGCATCTAGC CTTATGGCAT CATTAAATGAT GTAAAGATTA 1620  
 ATTAGGAGGG GATTCTCTTG GCAGTACCAA ATGAAYTGAA ATATTCAAAA GAGCATGAAT 1680  
 25 GGGTTAAAGT TGAAGGTAAT GTAGCAATAA TTGGAATCAC AGAATACGCA CAAAGCGAGT 1740  
 TAGGTGATAT TGTTTCGTT GAATTACCAG AAACAGATGA TGAAATTAAT GAAGGGGATA 1800  
 30 CGTTTGGTAG CGTAGAATCA GTTAAACTG TATCAGAATT ATATGCACCA ATCTCTGGTA 1860  
 AAGTAGTTnA A 1871

(2) INFORMATION FOR SEQ ID NO: 623:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 623:

45 TTGCTGTAGA AGATAAAGAG TCCCATCAAT GGATAGGCTT TATAGGTTTG AATTATATTC 60  
 CAGAAACAAG CGATTATCCA TTAAAGAAT TACCGCTTTA TGAAATAGGT TGGCGCTTGT 120  
 TGCCAGAATT TTGGGGAAAA GGATTAGCAA CTGAAGGCGC AAAGGCAACA TTGAAGTTAG 180  
 50 CAGAAGAACA TCAATATAC GATGTCTATA GTTTTACAGC AGAAGCAAAT AAAGCTTCAC 240  
 AACGTGTAAT GGAAAAAATT GGCATGACAG TGTATGATCA TTTCGAATTA CCCAATCTAA 300  
 55 GTAAGTATCA TTTATTaAAA AGGcAAGTGC GCTATTACAT TAATCTTCCg AAAGTGGAAG 360

ATTAGGGGGT GtTtnGtKtn ATTTTTTTAA n

451

(2) INFORMATION FOR SEQ ID NO: 624:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 665 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 624:

15	CGATAGTTAT CTAAAGCCAT TTTnGATTGT GTTATGAAAT CTAATGATGC GTGATAATTT	60
	AATGCrACAT AACGrTaATA TAAAATATCA ATAGTGAACA TTTGAGCAAA TAATGAAGTT	120
	GTTGCTCCCA TATGCATCTC ATTTTCATCA GTTTTCCCAT AAGTTAAAAC AATATTTGAT	180
20	GCCTGTGCTA CGGGATTATC CCTTGTAATA GTAATTGTAA TTATAGGTAT ATGGTAGTCA	240
	TCAATAACTT TAACCATTGA TTGCATTTCA CTTTGCGTAC CATTGTTAGT AATAAGAATA	300
	aCACTGTCGT TCGAATTGTG AGTTGCTAAT AATGTAGCAA AAATATGTGT TTCTTGAACA	360
25	AGTTGAATAT TAAGACCTAT TCTTGATAAC TTTTGGTATA AGTCGGTAGC AACTACAAAA	420
	GATGCGCCAA AACCATATAT AAAAATCGTC TCAGAACGTT TTAAACAATG ACATATTTGA	480
30	TCAATAGTTT TATCATTTAA TTCGTTATTT GCATGATTAA GTGCGCGTGT AGTACGTGTA	540
	TGGAGTTTAG TTCTTAAAGA TTCTGTGCTT TCGTTATTCA TTAATTCAAC ATTGTAAATT	600
	GATGATGCTT TAGGAACATA TTTAGATATA TTTATTTTCA AGTCGTGAAA ACCGCCATCA	660
35	GTAAT	665

(2) INFORMATION FOR SEQ ID NO: 625:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 625:

	GATGCCAATT AACCGTGCAT ATAATGTTGA GAAGTTAATC GAAGCAATTC AATATTATCA	60
50	AGAAAAAACA AATCGTCGTG TTACTTTTGA ATATGGTCTG TTTGGTGGTG TGAATGACCA	120
	ACTAGAACAT GCAAGAGAAT TAGCACATTT AwTAAAAGGC TTAAACTGCC ATGTTAACTT	180
55	AATTCctGTC AACCATGTTC CAGAAAGAAA TTATGTGAAA ACGGCTAAAA ATGATATCTT	240

	TTCGGATATT GACGCAGCTT GTGGTCAATT AAGAGCAAAG GAACGACAAG TAGAAACGAG	360
	GTAAAGACAA ATGCTAGAGG CACAATTTTT TACTGATACT GGACAACATA GAGATAAGAA	420
5	TGAAGATGCG GGTGGTATTT TTTATAATCA AACTAATCAA CAACTTTTAG TTCTGTGTGA	480
	TGGTATGGGT GGCCATAAAG CAGGAGAAGT TGCAAGTAAA TTTGTTACAG ATGAGTTGAA	540
	ATCyCGTTTT GAAGCGGAAA ATCTTATAGA ACAACATCAA GCTGAAAATT GGTGCGTAA	600
10	TAATATAAAA GATATAAATT TTCAGTTATA TCACTATGCA CAAGAAAATG CAGAATATAA	660
	AGGTATGGGT ACAACATGTG TTTGTGCACT TGTTTTTGAA AAATCAGTTG TGATAGCAAA	720
	TGTCGGTGAT TCTAGAGCCT ATGTTATTAA TAGTCGACAA ATTGAACAAA TTAGTAGTGA	780
15	TCACTCATTT GTTAATCATC TTGTTTTAAC GGGTCAAATT ACGCCGGAAG AAGCATTTAC	840
	ACATCCACAA CGTAATATTA TTACGAAGGT GATGGGCACA GATAAACGTG TGAGTCCAGA	900
	TTTGTATTATT AAGCGATTAA ATTTTATGA TTATTTATTA TTAAATTCAG ATGGATTAA	960
20	TGATTATGTT AAAGACAATG AAATTAAGCG TTTGTTAGTA AAAGAAGGTA CAATAGAAGA	1020
	TCATGGTGAT CAATTAATGC AATTGGCATT AGATAACCAT TCGAAAGATA ACGTTACTTT	1080
25	CATACTCGCG GCTATTGAAG GTGATAAAGT ATGATAGGTA AAATAATAAA TGAACGATAT	1140
	AAAATTGTAG ATAAGCTTGG CGGCGGTGGC ATGAGTACCG TTTATCTTGC TGAAGATACG	1200
	ATACTTAACA TTAAAGTTGC AATTAAGGCG ATTTTTATAC CACCTAGAGA AAAAGAAGAA	1260
30	ACATTAAAC GTTTTGAACG AGAAGTACAT AACTCATCAC AGCTATCACA TCAAATATA	1320
	GTAAGTATGA TCGATGTTGA TGAAGAAGAT GACTGTTACT ACTTAGTAAT GGAATATATC	1380
35	GAAGGTCCGA CTTTGTCTGA GTATATTGAA AGTCATGGGC CATTAAAGTGT TGACACAGCG	1440
	ATTAATTTTA CGAATCAAAT ATTGGATGGC ATTAAACATG CGCATGATAT GCGTATTGTA	1500
	CATAGAGATA TTAAGCCACA AAATATATTA ATTGACAGCA ATAAAACGTT GAAAATATTT	1560
40	GATTTTGGA TTTGCTAAAGC TTTAAGTGAG ACGTCTTTAA CTCAGACTAA TCATGTGTTA	1620
	GGTACTGTGC AGTACTTTTC GCCAGAACAA GCAAAAGGTG AGGCAACGGA TGAATGTACA	1680
	GATATTTATT CTATAGGTAT KGTGTTATAT GAAaTGCTTG TTGGTGAACC ACCCTTTAAT	1740
45	GGAGAACTG CAGTTAGCAT TCGATTAAA CATATTCAGG ATTCTGTGCC AAATGTGACA	1800
	ACAGATGTAC GTAAGGATAT TCCGCAATCT TTAAGTAATG TCATTTTACG CGCTACAGAA	1860
	AAAGACnAAG CGAATCGTTA CAAAACAATT CAAGAAATGA AAGATGATTT GAGTAGTGTT	1920
50	TTACATGAAA ATCGAGCGAA TGAAGATGTC TATGAACTCG ATAAAATGAA AACGATAGCG	1980
	GTACCTTTGA AAAAAGAAGA TCTAGCAAAG CATATTAGTG AACATAAGTC GAATCAACCT	2040

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AGCCAGAAGG TACGGTGTAC GAACCAAAAC CTAAAAAGAA ATCAACACGA AAGATTGTGC 2160  
 TCTTATCACT AATCTTTTCG TTGTTAATGA TTGCACCTGT TTCTTTTGTG GCAATGGCAA 2220  
 5 TGT TTGGTAA TAAATACGAA GAGaCACCTG ATGTAATCGG GAAATCTGTA AAAGAAGCAG 2280  
 AGCAAATATT CAATAAAAAC AACCTGAAAT TGGGTAAAAT TTCTAGAAGT TATAGTGATA 2340  
 AATATCCTGA AAATGAAATT ATTAAGACAA CTCCTAATAC TGGTGAACGT GTTGAACGTG 2400  
 10 GTGACAGTGT TGATGTTGTT ATATCAAAGG GCCCTGAAAA GGTTAAAATG CCAAATGTCA 2460  
 TTGGTTTACC TAAGGAGGAA GCCTTGACAGA AATTAAAATC GTTAGGTCTT AAAGATGTTA 2520  
 15 CGATTGAAAA AGTATATAAT AATCAAGCG 2549

## (2) INFORMATION FOR SEQ ID NO: 626:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 626:

TGCTTACTTC GCCTTCAATA CGTACTAATT CATGTCCACA ACTTGGACAA TGGGTTGGCA 60  
 30 TATGATATGT GACAGCATCC TCAGGTCTAC GTTCTGGAAT ACTACGTACA ACTTCAGGTA 120  
 TGATGTCACC TGCTTTTTTC ACTACAACAC TATCACC AAT TCGAATATCT CTGTCATGAA 180  
 TTAAATCCTC ATTGTGCAAA GATGCTCTTG aTACAGTTGT ACCAGCTACT TTTACTGGTT 240  
 35 CTAAAATAGC AGTAGGTGTG ACTACACCTG TTCGTCCAAT ACTTAATTCA ATATCTAATA 300  
 ATTTAGTTAC TACTTCCTCA GCTGGAAATT TATAAGCAAT GGCCCATCTA GGAGATTTTT 360  
 GTGTGAATCC CATCTCATCC TGTGATCTA AATCATTAAC CTTAATAACA ATCCCATCAA 420  
 40 TATCATAAGG TAATGACTCT CTTTGGCTTG TCCATTTTTC AATATACTCT AAAACACCAT 480  
 CGATATTATT TACACGCGCT CTATTTTAT TCGTTGTAAA ACCTAATTTA TCTAACTCAT 540  
 CTAATGCTTC ACTTTGCGAA CGCGCATTGA AATCAGTGAA ATCATTGACA CTATATATAA 600  
 45 ATACGCTTAG CTTTCGTTTT GCCGTTAATT TAGAATCTAA CTGTCTTAAT GATCCCGCAG 660  
 CAGCGTTTCT TGGATTnGCA AATAACTGCT CATCATTTTT TTCTTTTTCT TCATTTAATC 720  
 50 GTAAAAATGA ACGTCTCGGC ATATATGCTT CACCACGAAC TTCTACATTT AATGGtTCTT 780  
 TCATTTTCAA AGGTATCGCA TGAATTGTTT TTaAATTTTC GGTAATATCT TCACCTGTTG 840  
 55 TTCCATCACC ACGTGTTAAA CCTTGaACGA AGTATCCATC AACATATTTT AATGATACTG 900

GTTGGTCGAA TTTTCTCAAA TCATCCTCAT TAAATGCATT CCCTAAACTT AACATTGGCG 1020  
 TGTCATGGTT GACTTTATTG AAAGAGGCTT GGGCTTCACC GCCAACTCTA ACTGTTGGAG 1080  
 5 AATCTACAGT CTTATACTCA GGATGCTCCT CTTCTATTTT AATCAGTTCA TGAAGTAATT 1140  
 TGTCATATTC ACTATCTGGT ACAGATGGAT TATCCTCTAC ATAGTATTCA TAACTGTATT 1200  
 GATTTAATAA ATCATGTAAC TCGTTCACAC GAGACGATAA ATCAGCCATC CCTTAATCCT 1260  
 10 CCTTTTTTtC AATTGGTGCA AATTGCGCTA ACAAACGTTT TGGCCCTTGT GATTTAAGA 1320  
 TAATATCTAG TTCGATTGAG CCATTTTTTCT CGTTTACATT ACTCACCATG CCTTCTCCCC 1380  
 AGGCTTTATG CATCACTTTG TCACCTACAT TCCAATCAGA TGACAATACT TGTTTTTTCG 1440  
 15 TTGACGTTGT TCGTTGACTA AATCCGCGTT TAGCAAAGG TTTTGCCTTA GGTGTATCG 1500  
 TTTGTCGTTT GCCACTTGAA TGATTTTCTA ATAGTGATTG TGGAAITTTCC TTTAAAAATC 1560  
 20 TGGATGGCAT ATTTGACTGA GGGCGACCAA ATAACATTCT TGATGTCGCA TGAGTGATAT 1620  
 ATAACACCTC TTCAGCCCTT GTAATTGCTA CATAACAAAT ACGACGTTCT TCTTGCAATT 1680  
 CATGATCATC TCACTCTTA ATCGCTCTAA TATGTGGGAA TAAAGATTCT TCCATCCCCA 1740  
 25 TTATAAGAC AATTGGAAAT TCAAGGCCCT TAGCCGAGTG CATCGTCATT AGTGTTACGC 1800  
 CATTTTCAGT ATCTGCCTCA TCAATATCAG CTAATAACGA TAAATCCGTT AAAAAGTTAA 1860  
 TTAATGACTG TTCTTCTAAT GGGGTATTTT CCTCATAGTC TTTTGGTACT GACATAAATT 1920  
 30 CATCGATGTT TTCTAATCTA CTTGAGATT CTAATGTATT TTCACGTTCA AGCATTTCTC 1980  
 GATAGCCAGA CTTTTGTAAT ACTTCATCAA CTATTTTCATG AATTTCTAAA AATTCTTGTT 2040  
 CTTTTATCAA GCTTTGGATT AACTCGTAAA AATTAAGACA CTCTGTGTGC ACCTTTTTTG 2100  
 35 aCAATCCGAT AAAATCAGCT TCTCCAAGTG CATCAAACAT ACTGATATTG TTTTGAAGTG 2160  
 CATAGTTTTG AACTTTTTTCA ACAGATGAAG GACCTACACC TCTTTTTGGA ACATTaATAA 2220  
 40 TACGTTGCAA ACTAATGTCA TCATTACTAT TGGCAATTAT ACGCAAATAA CTTAATAAAT 2280  
 CTTTGA 2286

(2) INFORMATION FOR SEQ ID NO: 627:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 627:

TGACATTAAA AGTTGGGTGA AAAAAACAAGG CATACTTTAG TTAAGCTTGA TGAAAATAAC 120  
 AATGGAATTA ATGCGATTAT TCAAAAAGAA AAAGCAAAAG ATTTAGATAT AAATTATTCT 180  
 5 GCTAAAGGTA CTACCAATTG TATTATTTAG TGGAGAATTA GACAAGCTGT AGCAGCGTTG 240  
 ATTATTGCCA ATGGTGCTAG AGCTGCTGGA AAAGATGTAA CTACCTCCTT ACTTTTTGGG 300  
 GGCTTATGCC nTTAAAAAAG TGCCACCGTT AATGTTAAAA GCAGTTGCCA AAATGTTTGA 360  
 10 TTnATGTTGC CCCAAAAGAT TTACGATGCC CTTTCCCAA 400

(2) INFORMATION FOR SEQ ID NO: 628:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 628:

AATAATTTGG GCGCTnTTTG CGTCGGGATA TTATACCGCT TCCTTAATTG TTCAACATTG 60  
 25 TAATCACTGT TTTTCAATTG ATATTTTGCA GAGTAAATTG GTACTTCTGG GTTATATGAC 120  
 ACTTCGTCCT CTTTATAGTT TTCCAATTCT TTGAAATTCC CGTATTGTAC AAAGAAGTTA 180  
 AATTCTTCGA TTTCTTTTTT TACTTTTTTCG TCATCGATTG GTTTTAATGG AATCATTTTA 240  
 30 TTAKTTTCCA TTTTCACAGG ATATCTTTTT GTATGATTGT GTGTCATTCC ATCGCTATCT 300  
 TCAACAACCT CTCTAACAAT ATAATGCCCT TTAGCCGTTT TAGTATTTCT GTTAATTTCT 360  
 AAAACTGCTC CTCTTGATTG CAGATTTTCT CCTTTTAATT GGATTTTCAT TTCAGATCTA 420  
 35 ATTAGcCAAG TACCTTTATC ATCTnTTTTA AAT 453

(2) INFORMATION FOR SEQ ID NO: 629:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1221 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 629:

TCATATGCAT TTGCAAAATA AACGCCAGAA GCAAGGTTTA GAATTGGGCC GTCCGTTTTG 60  
 50 CTCAaTTTCACT TTGcATTCAA TAATTCATGC TGATCATGAT CAATTTGCTT ATCTAATTCT 120  
 GCaATTTTCT TCATTTGCTT ATCTGATTTG TTTTCTTTTCG CCATCATTTG ATCAGGACGA 180

5 GCTAATGGTA CTAATACTTT ATCTCCATAT GTGTCAATAA AGTTATAAAA ATAATCATCT 300  
 GTTTTTGATA CAAATCCAGC ACGCTCTTCA GTTTCACGAT ATAAATCTAA GAAAAGATTG 360  
 AACTCATCAC GTTCAAGGAA TCTGACTTTA ACACCATAGT TTATCGCTTT ATTAATATTA 420  
 CGTTTACGTT GACTATCAAA TGTCTTTTTT AATGTTTCGG GTGTTTTTACC TTCAAGGTTT 480  
 AATACGCCCA TCCATCGTAC TTGGCTCGAT GTATCATACT CAGTTGTAAA GCCATGATGC 540  
 10 TCGTAACCAT GTGATTTAAA CAAGTTTACT AGGGCATCAT TTTTCTCGCG ACCTTCAAAT 600  
 GGCACGATAT CTTTATCATA TAGATGATAT AACCAATACG GATCTAATTT AACATATAAA 660  
 CATTGATGTT GCTGTAAATA TTTATCTAAC TCTTTTAAAT AATAATCAAC TAATCCTAAA 720  
 TCTGAAAAAT CCATTACTGG ACCACGATTC GAATAGTAAA CATAACTTCC CATAGTAGGA 780  
 ATTTTAGAGA AAAGGCTTGC TGCAATTACT TTGTTATTGT CGTCTTTAAT ACCTAATAAA 840  
 20 ACTACTTCAA AGCCATCATT CTCACGGGTA ACTATATTTT CTTTACTTG GAAATAATGA 900  
 CTTTCCAATG ATGGATTTTG TACAAAGTTG TCAAATTCGG TAACAGTTAA CTCTGTAAAT 960  
 TTCATGTTTT GATAATTCCT TCCTAAAAAA TTCTGTCTTT AACTTTTTTA AGTGCGGTAT 1020  
 25 ATGCTGCGTA AACAGGTTTA TTAATTGGTT TAATAAAGTC ACCAACATAT TCMATAATTT 1080  
 CAGCATTGTA ACCTTTTTTG AATTAACTA CACCAGCATC TTCAGCATCT TCTGTAAATT 1140  
 TrCCACTAAC ACCATAGAAA TTATAACGGT CAATGCATGA TTTAATGCAT AATTAATCAT 1200  
 30 TTCCCATTCG ACTGCATAAC T 1221

(2) INFORMATION FOR SEQ ID NO: 630:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 630:

45 TGGCCCAANT AACACAAGTA ATTGCTGCTA ATGGTAACAT CACAAAAAAT GAAATCGTAA 60  
 CTACAAATGT TAAACCTTGG AATACACCAA CCATTTCTGG TAATCGTTTA CTATAGTATC 120  
 TATTGTGAAT CCAAGTAATA ATAGCTGAAA TAATAATACC ACCTAGAATA TTCGTATCCA 180  
 ATGTGGCAAT ACCTGCAATT GATTTTAAAC CAGGTACATT TTCAACGCCT TTTTCTAAAT 240  
 50 TAGCGCCAAA CGTATGTGGC CATTGTGTTA AAATGGCATT TATAAATGTA TTAACATTA 300  
 AGTAACCCAT CAATGCTGCA AGTGCTGCAT GACCTGGTGC TTTTTTAGCT AAAGAAAGTG 360

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TTACTGACCA AAATTTAAAC CAAAACGTAT GTTGATCTGC TAAACTCCCC ATGATTGTAG 480  
 GATTTTAAA TAATGTGCA AAGCCAAGCA CTATCCCCAA GAAAGCGAAC ATTAATACCG 540  
 5 GTACAATCAT TGCACTACCG AAACGCTTTA TCGCATTCTAT CTCTATTCC CTCCATATCA 600  
 TCTTTCCTAA CAATACATCT AATTAGATTG ATTTATAAAT AGATGTCTTA CTATTTAAAT 660  
 ATAATATATA GTAAACGCTT ACACACCTAC AACGACATTG ACGTATTTTG AAAGTATTTT 720  
 10 GTATAATCAG ATTATCTTTT CATATAGTGA AAATTTTTTC ACGACCTTAT ATATGACATC 780  
 GTTGATTG TAATACATTC GTTTTAAACG CATAATCAAA CCTATATCAA TACACAAATA 840  
 15 TATATAATGA CATAAAGAT TTTAATGTAA TAACGATCTA TTACACATTT ATTTTCAAGG 900  
 AGGTGAATA TGTTTTTGA TGAACACATT AATCGAACT TTGATAAACT TAATGATAAT 960  
 GATTTACATA TCGCTCACTT TATCAATACA CATATAGATG AATGTAAAAA TATGAAAATA 1020  
 20 CAAGATTTAG CGCAATTCAC ACATGCCTCG AATGCAACCA TTCACAGATT TACACGCAAA 1080  
 TnAGGTTTTG ACGGTnATAG TGGATTTAAA TCGTACCTTA A 1121

## (2) INFORMATION FOR SEQ ID NO: 631:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4005 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 631:

AACCTTCCAT TTTACTTGAT CGATAACATC AGTTCTGCTT TACAAATCTC TTCATTAATA 60  
 35 TCGCTCTTAA AACCATGAAA TTTAACATGT TCCGATAAAT GATAATCTTC TACAAGTTGT 120  
 CGATATTCTG ACAAACCATT TCCATGTCCA TAAATATTCA ATTGAATATT GGGATGTTTT 180  
 40 GTTACTAATT GCTTGATTAC TTCAATTTGA TGTTTAATTT GTTTATTTTC AACGAGGCGA 240  
 GCAATTGATA TGATATGATT TTTCTCCTTT TGATTGATGT CAAATTGATA CTTTAAATTT 300  
 GCCACGTAGC CAACCGGAAT ATTGATAACT GGTATTTTAT TTTCAATATA TTGTGAAATA 360  
 45 TCTTGGCATT GCTTTTCTGT TGATACAACA ATCGCTTTAT AACGTGTTAA ATTATTAAAC 420  
 ACTGTTTTAT AAAAATTTT TATACCATTA CCGGCACCGG ATAAATGTGT ACTATGGAGC 480  
 ACAACAATA CTGGAATACT TTGATTTAAT CCCGCTATAA CATTTCCTAA TTCATGAGGA 540  
 50 CGATCTAATA TGATTTGATC ATTATTTTTA CATAATTGAT GGAGAAAATA TTGAACTAAT 600  
 TCATCTTCTG TATCAAAAAA TTGTTGATGC TGGTCTTCAT TTAAGATAAC CTTTGTGAGC 660

	TAGTAATTTT CGAGTACAAT CCGTTGTCCT TCACCTAAAA TTCGAGAACA ACTTAAAAAG	780
	CCTCTTCCAT CATACAATTC GCGTTTTACT TTTCTTCTTT TATGATCAAA ATAATTCACA	840
5	TAATTTAATT GATGATACTG TTTATCTAAA AAATGAGCAT ACATTACAAA TTGCTCTTCA	900
	TCATATATTC TGACATCATT TGAATTTTCC ACAAATTTCA ATGTGTACCT ACATGACTTT	960
	TCCCAATACT GSTATCCAGTT AACTTGCTTT GTCTTTTTTAT AATTGATTGC TTTTGTAAAA	1020
10	TAGTCATACA TTGTAAATAC ATCATTTTCA ATCTGATGTT GCTTCGCATA TGTGTATGAA	1080
	TAAGGATTCC ATTTAACATA TACACATTTT GAAGATATGC CGTGTTGTTT GAACAACTTC	1140
	AATCTATTTA TTTGCGCTTT TTCTACACCT GTAATTTTAC TTTCTAAAAT TGTTCCTAAA	1200
15	ATGTAATTCA TATTATCGCC TCATATAAGT TTTATTCCGT ATCTTTATTG TTTATTTTAT	1260
	ATGAAAAATA CATCTATTGC ATGTGTAATT ATAAAAAAAC CAGGCCACAA GGACCTGGGT	1320
20	CATATTGTAT TATTTGTTTT GTTTTTTGCG ACGACCGAAT AACAAATAATG AACCTAATGC	1380
	TGCAAATAAT CCACCAAATA ACGTTGCGTT ATTTGAGCCG TTATTTTCAC TACCTGTTTC	1440
	TGGTAATGCT TTTGCTTTAT TGTGATGGTC TTTAGTAGTA CTCATTGGTT TAACAGGTGT	1500
25	ATGTTTTCCCT GCATCCGAGT CTGAATCGCT GTCTGAATCA CTGTCTGAGT CTGAGTCGCT	1560
	ATCAGAGTCT GAGTCGCTGT CCGAATCTGA GTCGCTATCT GAGTCTGAGT CGCTGTCTGA	1620
	ATCTGAATCA CTGTCTGAGT CTGAGTCGCT ATCTGAGTCT GAATCGCTGT CTGAATCTGA	1680
30	GTCGCTATCT GAGTCTGAAT CGCTGTCTGA ATCTGAGTCG CTATCTGAGT CCGAATCGCT	1740
	ATCTGAATCT GAGTCGCTGT CTGAGTCTGA GTCGCTATCT GAGTCTGAAT CGCTGTCTGA	1800
35	GTCCGAATCG CTATCTGAAT CTGAGTCGCT GTCTGAGTCT GAATCGCTAT CTGAATCTGA	1860
	GTCGCTATCT GAGTCTGAAT CGCTGTCCGA ATCTGAGTCG CTATCTGAAT CTGAGTCGCT	1920
	GTCTGAATCT GAATCACTGT CTGAGTCTGA GTCGCTGTCT GAGTCTGAGT CGCTGTCTGA	1980
40	GTCACATCT GAGTCTGAAT CGCTGTCTGA TGTATCTTCT TCGAAGTATC CGTTATCAAG	2040
	TGTGAAATCA TCATGATCCG TAATTGTTAC GTCAACTTCG CCACCATCTG CATCTTTTATC	2100
	ATCTTCAGTT GTATTTGTAA CTGTTTGTGT TAAGCCAGCA GGCTTTTCAA AAATAACTTT	2160
45	GTATTTACCG CTATCTAAAT TATCAAAGCA GTATTTACCA TTTTCATCTG TTTTAGTTGT	2220
	TCCAATTACT TCGCCTTTTT CATTTAATAA AGTAACTTTA ACATCTTTGA TACCTTTTTTC	2280
50	AGTTGAATCT TGTTTGCCGT CTTTATTACT GTCGTACCAA ACATAATCAC CTAAACTATA	2340
	TTTTGGTGTT TTATAGAAAC CACTGTCTAA TGTGATGTTA TCTGCATCTT TAATGACACC	2400
	TGTTGTTGTT AAACCATTAG AATCTTTTTT AGTATCATTT CCAGAAGTTA CTGAAGTTGG	2460

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	TTGATATTTA CCATTTTCAT CTGTTGTAAC TGTTTTTAAA ACTTTGTCGT TTTCATCTTT	2580
	TAACGTAACT GTTACACCTG AAATGCCCTT TTCATCTTTA TCTTGAACAC CGTTTTTATT	2640
5	TGTATCTTCC CATACATAGT CACCTAAGTT GTAAGTCGGT TTGTAGAAAC CAGAGTCAAT	2700
	AGTATCGTTA TCTTTATCTT TAATGACACC TGTGTGTGAT GTACCATTG AATCTATACC	2760
10	TTTCATCAGTT CCTGAACCTA CTTGTGTTGG TGTGTAACCT GATGGTGTTT CGAATTCAAC	2820
	TTTATAAGTT CCATTTTCTA ATCCAGTAAA TTGATATTTA CCATCTTTAT CTGTTTTAGT	2880
	TGTTTTGTAAA ACTTCACCGT TTTCATTTTT CAATGTAACT GTTACGCCTG AAATACCTTT	2940
15	TTCAGTTGAA TCCTGCTTAC CATCTTTATT TGTATCTTCC CATAcataat TACCTAAATT	3000
	ATATTTTGGT GTTTTGTAGA ATCCACTATC TAATGTCATG TTATCAGCAC CATTAATAAC	3060
	ACCTGTTGTT GTTAAACCAT TAGAGTCTTT TTCAATGTCG CTACCAGATG TTAAGTGTAGT	3120
20	CGGTGTATAG CCTTCTGGTG TAGTAAATTC AACTTTATAA TTACCATTAT CTAAATCAGT	3180
	AAATTTATAT TTGCCATCAG CGTCTGTTGT AACTGTTTTT AaCagTTACC GTTTTCATCT	3240
	TTTAATGTTA CCGTTACGCC AGATATACCT TTTTCATCTT GGTCTTGGAT ACCATTTTTTA	3300
25	TTTGTATCTT CCCAGACATA GTCACCTAAG TTGTATTTAG GTTTGTAAAT ACCTAAGTCT	3360
	GCAGATAAGT TATCTTTGCC ATTAAGTGA ATAACTGAAG ATAAGCCGTT TGAATCTAAT	3420
30	TCTTCGTTAT TACCTTGTTT TGAAGGGGTT ACTTCATAAC CTTTTGGTAA GTTTGAAAAT	3480
	TCTACACGGT AATCTCCATT AGGTAAGTTT GGAATCAAGT ATGACCCATC TTCTTTAGTA	3540
	ACTGCTTCTC CTACTTTTGT ATTTGTATTA TTATCAAATA CAGTTACAGT TACATTGCCA	3600
35	ACGCCTTTTT CTCCTAATTC TTGAACACCG TTTTATTAG TATCTTCCCA TACGTAGTTA	3660
	CCAATTTTAT ATACTTCTTG ACCAGctCCG CCACTTTGGT TATTAGTAAA TCCTAAAGCA	3720
	TTGCCAGTAG AAACGGATTT ATTACCTGTT GAAGATAAAG TAGCCATTG AACAAGTGTT	3780
40	GGGCTTTCGC TATTTGTATA TTGAATTTT GTATTAACCA TTACAACATA AGCAGAATCT	3840
	GCATTTCCAA AATCAATAAC AGCGCTATTG TtGTGCGCAT ATGTAATTTT CTGCAAGTAT	3900
45	TGATTTGTTA CATCTGTAAG CTCTTTAGTA TTCACATCGT ATCCTTTATT TAATGTATAA	3960
	CCTTTAGGAA CTTGATATAT TTTTATATCT GTTACATCTT TATTT	4005

(2) INFORMATION FOR SEQ ID NO: 632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1440 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 632:

	TATTAGGTTA CTCTAGTTTC CAAAGCGGGA ATTTTAATGT TATTAACAGC AAGGACAGCA	60
5	AAAGCAATAT CGGCGCATTG ATTGAAAATC CAGGAATATA TCCTTTTATG TCTGGATATG	120
	AAAACCTTGAA GTTATTGAAT GAATCAAAAA AACTCAAGA TATCGATAAA ATTGTCTCAC	180
	AAC TTCATAT GGATGAATAC ATTCATAAAA AAGCTAAAAC GTATTCTCTT GGTATGAAAC	240
10	AAAAATTAGG AATTGCTATA GCATTTTAA ATAAACCTCA ATTCATTATC TTAGATGAAC	300
	CAATGAATGG CTTAGATCCA AAAGCTGTGC GAGATGTACG TGAATTGATT GTCCAAAAAG	360
	CGCAAGAAGG TGTTACTTTC TTAATTTTCA GTCATATTTT AAGTGAATTA GTTAAAATCA	420
15	CAAACCTCTAT CCTTATTATT AACAAAGGTA AAATTGTTAC AGAAACATCG GAAGAAGAAC	480
	TTAAACAATT TAAAGATAAT GATTTAGAAA ATGTATTACT AGAAATCATA GAAAGGGAGG	540
20	ACCAAGCATA AAATGGGAAC TTTAATTAAA CAAGAATGTT TCAAATTATT TAAAAAGAAA	600
	TCAACTTTTA TCGCACCTAT TGTCTTTATT CTAATAATGG TTGCTCAAGG TTATATTGCT	660
	ACAAAATACA ATGAAATTTT TACGCCACAG GAATCTTCA CATCTGCTTA TAATGGTTTT	720
25	TCATGGTTTG CATTTTTTATT AATTATTCAA GCAAGTACAA TCATTTCAAT GGAATTTTAT	780
	TACGGTACGA TTAAAAATTT ACTCTATCGT GAATATTCAA GAACAACTAT GATTGTTAGC	840
	AAAATCATCA CATTATTTAT TATTTCTTTA ATTTATTTTG TTATTACAAT TATTGCTTCA	900
30	ATTGTTATTG GGTCTTTATT CTTAATGAT TTAAATATAT TTGAAAGTAG CGGTAATCAA	960
	TTATCTTTAT TGAATCAATT ATTATTAGTT AGTTTAGGCA CATTGTGTTG CGTTTGGTTA	1020
	GTTTTAAGCT TAACGTTGCT ATTATCATCT GCAACAAATT CAACGGGAGT AGCCATTGCT	1080
35	GTAGGTATTG TTTTTTATTT TGCAAGTTCT ATTTTAGCAG TTATTCAAAC GGCACCTTTA	1140
	GAAAAAATAG ACTGGCTAAA GTGGAATCCT ATTAATATGA TGAATATTAT GCTTCAAACA	1200
40	GTTGAAAAAG GCTTTAGTAA GTCGACAAAA TTAGAACTTC ATGAATTGTT TATTGGTAAT	1260
	ATTGCTTATA TTTCTATTTT CTTAATACTT GTAGTATTTA TTTTCAAGAA GAAAAATATT	1320
	TAGTAACTTA AAGTATTAAA TGTCTAAATA CACACATATT CCATCGTAAT TCAAATCAT	1380
45	TTTCAAATCC CTTCAACCAA ATAATGGTGC GGGGATTTTT TCATCCAAAT TTTGGAAATT	1440

## (2) INFORMATION FOR SEQ ID NO: 633:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1323 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 633:

5 GCTGACATAA TTGCATCAAA TTTCACATCC CCATAAAAAT CGCTACCACA TAACCTACGA 60  
 TAATACCTAC AAGAACTGGA ATTAAAGATA GGAATCCTTT AAAAAATCCT TGAACGACTA 120  
 TTGTTACAAG CAAGGTTATC ATTGCAACAA TTAAGAACT GATATTGTAA CCTTTCATAT 180  
 10 CTCCAGGATT TTCATACATT GCCATATTGA CTGCAGTAGG CGCTAAGCTT AAACCAATTA 240  
 CCATGATGAC TGGTCCAACA ACAACTGGTG GTAATAATTT CATTAAACCAT GCTGTCCCAC 300  
 TTAATTTGAT TAGAATCCCG ATGATGACGT ACATAACACC ACTCATGaAT AATGCTACAA 360  
 15 GCATGTCTCC TAAGCTATGC GTACTTAATC CCGTGATAAT TGGCGTGATA AATGCAAAGC 420  
 TAGATCCCAA GTATGCTGGT ATTTGCGCCT TCGTTATTAA GATATAAAGT AATGTACCGA 480  
 TTCCCGAAGC TAGTAACGCT GCTGATATTG GTAGTCCTGT TAAGAATGGT ACTAGTACTG 540  
 20 TTGCGCCAAA CATCGCAAAT AAATGTTGTA AGCTTAAAAA TGCCCATTCG GCTGGTTGTG 600  
 GTTTTTTCATT TACATCTAGT ACGGGTTTTA CTGTTCTGTTT AACATTTCAT TCATTTTGCA 660  
 TAATATTCAT TTCCTCCGAT AATAAAAAAA TCTCTTTACA TCAGTATATG TAAAGAGACA 720  
 25 AAAAGTGTGA CAAGTTGCTA CAAGTCATTT TCGTCCATAG AAATTGACTT ATAGTTGTCTG 780  
 AACATGAGGG TATTATTAGA TAAACAAGCA TATGAAAAC TATTTATCAT TCAACTCCCC 840  
 CACCTTTTTT AGTCTCTCGT ACTGAATTAA AAGGGGtATT ATTTAATTAT AACTGCATTT 900  
 30 CTTTGATCCa TTtCTTCyAA ATAGACACTT ACCGTTTCCT CTTTAGAAGT AGGTAWATTT 960  
 TTACCAACAA AATCTGCTCG AATTGGTAAC TCACGATGTC CTCGATCAAC CAAAGCAGCT 1020  
 35 AAACCAATTT TAATAGGTCT AGCATTTAGC AAAATAGCAT CAAGTGAAGC ACGAACCGTT 1080  
 CGACCAGTAT ACAGCACATC GTCAATAATG ATGACTACTT TATCTGTAAT ATCTGTGTCG 1140  
 ATGTCTATTG CGTCTTTTGT CGTAAGTGAT GACATGTGct CTATATCATC TCTAAAGTAT 1200  
 40 GTAATATCAA TTGTTCCAGT AGGTATACGT TGTGCTCAA TTTGATGAAT TTtATCTTGT 1260  
 ATACGATTCT CTAAATATTC ACCTCTTGTh TTGATACCTA AAAGATTAAA TTATCAGTAC 1320  
 CTT 1323

## (2) INFORMATION FOR SEQ ID NO: 634:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 761 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ACCCATCTCA TCGTATTTTG AATTTAATAG ACGAGATCGA TGTATATCTG AATTCATCCC 60  
 AACTATGGAT TAATGTTGGT ACATCATLAA cGCATAACCA ACATTTTGAG CAGTTGTTTT 120  
 5 ATAAGTAACG TGATTTTTAT CTAATTGCCC TCTTAATGCG TCCTCTGTAA ATTCAACACT 180  
 ATCAGAACCA TTAGAGGTCG CTTTCATATAA GTTATTAGAT GCAATATGTG CTAAATCGCT 240  
 ATTGATTTTC AATGGTTTTA ATCCTTTTAA TTTTCTCATT TCATTCTGTA CTTCATAAAG 300  
 10 AGAAATTAAT TGATTTGGAT TTTGCTCAAC TGGACGCTTA TTATGCTCTT CTGACGTAGA 360  
 ATTAGAATTT AATTGATAAG GTTCAATATC TGCTAACATT TCTTTTGTTA AAAATCGTAC 420  
 ACTTAGCACC TTTTCGATT GTTGATCAGA ATACACTTGT GCATATATGT CGCCATATTT 480  
 15 AATCaGTGTT TGTGTTTTTA AATCTTCATC TGAAAGTTCA AATTCATATT TTTTACCATC 540  
 AACTTTAAAG GACGGTCTG GATTAATACT TGTATGATTA AAAATTTCTG CAGAATGTTG 600  
 20 TCCTATTTTT AACGGACTAA CATTGACTTT CTCACCTGTA GCATACACTG AAACGATTTT 660  
 TTCACGTTTA GTTGAACAA TGTAATAACT GTTTTTGTCT TTAAACACAT AATTTTTGTA 720  
 rCCATCTCTA AAAGGGTAGA CrCGATCTGC TTGTCCAAAT T 761

(2) INFORMATION FOR SEQ ID NO: 635:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 827 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 635:

nTAAATATAT TTATATATTA TAGAATAGAA AGACCTGAAG ATTGAATATC TTTCGCAAAG 60  
 CCTTTAACTG TATCTACTGA TAATTCGTTA ATATCGCGAC CTAAGTTTGT ATTCACTTTT 120  
 40 TTCACAACAT CTGCTGGGCA TGTAATAATA TCTGCACCAA TTTCATCAGC TTGAATCACA 180  
 TTGAATAATT CGCGGCAACT TGCCCATAAAT AATTAAACGC CGTCTTTACT ATGCGTAACT 240  
 TTnACAGCCT CTkTCATTAA TGGTaATGGA TCTACGCCTG TAtCTGCAAT ACGTCCTGCA 300  
 45 AATACTGAAA CATATGTTGG CACACCTTCA GTTACTGCTT CAGTTATTTT TTTAACTTGT 360  
 TCAATTGTGT AAACAGCCGT AACGTTTAAT CTCACATTGT CAGCTGAAAG TTTTTTAATT 420  
 AAAGGAATCG TTGATTACCC TTTTGTATTT ACAATAGGAA TTTTAACAAA TACATTTTCG 480  
 50 CCATATTGTT TAAAATTGC TGCTTCTTTk TCCATAGTTT CTAAATCGTC TGCAAATACT 540  
 TCAAATGAFA TTGAAGCATC TGGAATTTCT TTCACAGCTT CTTACGCAAA AGCTTTGTAA 600

TTTTTATAAG CTGCTTTTCAT TnCTTCAATA TCTGCACCGk CCGCAAATAC TTCTACATTT 720  
 AGTTTAGCCA TATAAyATAG CCTCCTTGAT TCTTATTAAA ATTTTAACAA CATCTGCATG 780  
 5 kCTTTTCTT ACAACCATTT GTAAAAAATG ATTTTATT TTtGTT 827

(2) INFORMATION FOR SEQ ID NO: 636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 636:

TTAGTCGGTA TAACCATCGG CTAGGTGGTT TTTGTATTAA AAAAGTGGAT aCCAAAATTT 60  
 20 ATTAATAATT ATTTTAATGT TAGAAAAAAA CTAAATAAAA ACTCGCTAAT GATATCCAAT 120  
 AATATGTATA CAAAACGAGA CATATATTGC ATATGATTAA CGAGATACTG AAAATATTTT 180  
 ATCACCCCTA AAATGATTAT TCATTTTCAG CGGTAATTCG ACCTAAAGTC AAACCTACAA 240  
 25 TAAAACCGAT GATAAATACT ACTAATGAAA CGAACCACAT CACGATATTA GTTGGTAAAC 300  
 CTGGAAATAC TGCAAAGAGG GAGCCAACAA CAAAACCAAT GATTAATGCA AAAGTCATTA 360  
 GTTTATGATG TGTTAGGAAA TACTGGATAA TTTTGCTTGA AATAATGAAT CCAGCAAGCA 420  
 30 CGCCAAATCC GACTGCAAGT AATATAGGAA GACCTGCAAA GTTAAGTTTA ACAACTTCAG 480  
 ATATTGCTAG CATGACCGTA CCATAGACGC CAAATACTAA TAACATAAAT GACCCTGAAA 540  
 35 TACCTGGGAG TAACATAGCA CTAGATGCAC ACATACCTGC AATAAAATAT TTAATAATAA 600  
 GACTAGTTGA TAGAGTAAGT GTTCTCCAG CATGTTTATC ACCATTATTC ATTAATGTAA 660  
 TAACAATTAA GATAGCGATA CCAGCTATAA CCATCATGTA ATGTYTAGTT GTAAATGACG 720  
 40 TTTTATAGTT AGAAATTTTC AATAAATATG GAACGATACC AATGATTAAT CCACCAAAGA 780  
 AAAACATAGT TGGAATATGG TGTTGGCTTA ATAAATAATT AAAAAGATTA CTTAGTGATC 840  
 CCATTGCCAG TAACATTCCA ATTATAATGG GGATTAAAAA TGTAAAACTT GGCCAAAAAC 900  
 45 GTCGTGAGAA TATGCCGCTA ATTGAAGCGA TAAATTGATT GTAAATACCT AACAATAATG 960  
 CGATAGTCCC ACCGCTAACA CCAGGTACCA AGTCACTCGT TCCCATAGCA AAACCTTTTA 1020  
 50 GAATATTAAT CCATTTAAAT TGTTGCATGA ATAACCTCTT TCAAACGATT GGAATAAAAT 1080  
 CATAAATAGC ATCATACCAT ATTACAAATG TCCTAGTGAA ATGATAACAT ATTTTAAATT 1140  
 CATAAATCC ATTGAGAAAT TATGTGCACT TATTATCATT TATATTTTTA AAGAGAGCGG 1200

AGGTATAAGT AAGTTATAAT TAACTGAACG CATTATTACA AAGTCTTTTT GACTACAAAT 1320  
 TAAAATTATT ATAAACTAGT TAAGAAAAC TATATTTTA CGGAGGGAAT ATAAAATGGC 1380  
 5 ATCAACATTA GAAATyAAAG ACCTACATGT GTCTATTGAG GATAAAGAAA TCTTAAAAGG 1440  
 TGTTAACTTG ACAATTAACA CTGATGAAAT ACATGCCA 1478

(2) INFORMATION FOR SEQ ID NO: 637:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1995 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:

20 ATTACAGCAT CTTCTCTAGG TAGATTATTA AAAGATAGAG GTCTAAATGT AACAATTCAA 60  
 AAATTCGATC CATACTTAAA TGTGACCCA GGTACAATGA GTCCTTATCA ACATGGTGAA 120  
 GTATTTCGTAA nGGATGATGG TGCAGAACT GACCTAGACT TAGGACATTA CGAAAGATTT 180  
 25 ATTGATATTA ATTTAAACAA GTTTTCAAAT GTGACAGCCG GTAAAGTGTA TTCACACGTA 240  
 TTGAAAAAAG AACGTCGTGG TGATTACTTA GGCGGAACAG TTCAAGTTAT TCCGCATATT 300  
 ACAATGAAA TTAAAGAACG TTTATTACTT GCAGGGGAAA GTACGAATGC AGACGTTGTT 360  
 30 ATCACTGAAA TTGGCGGTAC AACAGGTGAT ATTGAGTCAT TACCGTTTAT TGAAGCGATT 420  
 CGTCAAATTC GTAGCGATTT AGGTAGAGAA AATGTTATGT ATGTTCACTG TACATTACTG 480  
 CCTTATATTA AAGCTGCTGG AGAAATGAAA ACGAAGCCAA CACAACATAG TGTAAAGAA 540  
 35 TTACGAGGCT TAGGTATTCA ACCAGACTTA ATCGTTGTAA GAACTGAATA TGAAATGACA 600  
 CAAGATTTAA AAGATAAAAT TGCATTATTC TGTGACATTA ATAAAGAAAG TGTTATTGAA 660  
 40 TGTCGTGATG CAGACTCTTT ATACGAAATT CCATTACAAT TAAGCCAACA AAATATGGAT 720  
 GATATCGTTA TTAAACGTTT ACAATTAAAC GCGAAATATG AAACACAGCT TGATGAATGG 780  
 AAACAGTTGT TAGATATCGT TAATAATTTA GATGGTAAAA TTACAATTGG TTTAGTAGGT 840  
 45 AAATATGTTA GCTTACAAGA TGCATATTTA TCAGTTGTTG AATCATTGAA ACATGCTGGA 900  
 TATCCTTTTG CCAAAGATAT TGACATTAGA TGGATTGATT CAAGTGAAGT AACAGATGAA 960  
 AATGCAGCCG AATACCTTGC AGATGTCGAC GGTATTTTAG TACCAGGTGG ATTTGGTTTC 1020  
 50 CGTGCAAGTG AAGGTAAAAT TAGTGCAATT AAGTATGCTA GAGAAAACAA TGTACCATTC 1080  
 TTTGGTATTT GTTTAGGAAT GCAACTTGCA ACAGTTGAAT TTTCAAGAAA CGTATTAGGC 1140

TTACCAGAAC AAAAAGATAT CGAAGATTTA GGTGGTACAT TACGCTTAGG CTTATATTCA 1260  
 TGTTC AATTA AAGAAGGCAC ATTGGCACAA GATGTTTATG GTAAAGCGGA AATTGAAGAA 1320  
 5 AGACATCGTC ATCGTTATGA ATTTAATAAT GACTATAGAG AACAATTAGA AGCAAATGGT 1380  
 ATGGTGATTT CTGGTACAAG tCCAGATGGA CGTTTAGTAG AAATGGTAGA GATTCCGACA 1440  
 AATGtTTCTT TATTGCTTGT CAATCCACC CAGAATTCTT ATCTAGACCA AATCGTCCGC 1500  
 10 ACCCGATTTT TAAATCATT ATTGAAGCTT CATTAAAATA TCAACAAAAT AAATAAATTT 1560  
 GCTAATAAAA CCGGTACTTT CATTGT TAAA CATTGAAAGT ACCGGTTnT CGTATAATTT 1620  
 15 TAATATTATG TTAGTGACAA GGTATGAAAT AACAATAGTG ACTTTTATAA TTCTAAGTCT 1680  
 CTTGTCATTT CAATCATTTG TGTATAAATG TCATAGTATA CATAATTCAA TGCCATCGCA 1740  
 TGTGGTyGGA CAATCTTATC GTAATCTTCA GTGTAGACTA TAGGTcTTGG TGTAGATAAA 1800  
 20 TCGATAAAAT GTACGAGATG ATCAGGGAAA TCATCTGTTT TAGGTTTGTT GCTTATTAAG 1860  
 ACCACATCGA TATCTAAGTC GATAAGTTTT TGAATATCTA ATGCAACTTG ATyATTATAA 1920  
 AATGGTGCGA ATAATAATAC ACGATCAGTT GAGTCAATTT CTTTAawkTC TTTAATAGCG 1980  
 25 TaAGTTTnCG GCTAG 1995

## (2) INFORMATION FOR SEQ ID NO: 638:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:

ATTAGTGATG AAAGTCAGAT TGAAGCTTTA TTAACAGCTG AAAAATATTC AGAAATGATT 60  
 40 GGTGAATAAT CACCGTGTA CTCCTTAATC TAAGATTGAG GAGTTTATTT TTAGTCTGAG 120  
 AAAATAAATG ATATGAAAGA AAAATTATTA GGTACTATTA TTTGGAGTAT TGCTACATTT 180  
 45 TATTATTCAA GAATGATGGA AATAATGAAT TTAGCTATTT TAAAAATAAA AATTGGGGGA 240  
 AGTTAATATG CTAAACATTC AAGACGTTAn CATnCTTTCT AAAAAGGAGC AAAAAGCATA 300  
 TAACCGTTTC GTAGAATCTG TAGAAAACGG TAATTTACCA GTACTACCAT GTATTGAAAT 360  
 50 GGATCTAAAA GAGATGCAAG AAGAAACATT AAACCAGAGT AAGATTGGTG GAATGCCATT 420  
 TTTAAATCT TTTAAAGATA TACCATTAGA TGAAAATAAT GTACCAATGG TATTGCTAGC 480  
 55 ACAGATTAAT TTGGATGATC TTCCAGAACA ACAAGAATTA TTTCTGTAA AAGAAGGGAT 540

	AAACAATATA AACTCAAGGC TTGTTTATAT AAAAGAGCCA ATTACAGATT TATCACTCGA	660
	AAATATTCAA GCGCATTGA AGTCATTAGA TGCTGATAAT GAGGATATCC CGTTCAGTGG	720
5	AGCATTTTCT ATAGAATTTA GATTGTGCGAA ACAAACTATT ACATGTACTG ATTATAAGTA	780
	CGATGAGGAC GTGCTTGCAT TGTGGAATAA AGTCAATCCA TCCTTCGCGC TAAAATCAAT	840
	GTTTGGTGGT TATGATGAAT TGATGGAACC TGTGTGTAmC AywTTTACTG CTAAGgAACC	900
10	ATTTAATCAA CTTGGTGGTT ATCCATATTT TGACCAAATA GATCCAAGAA CGAACGATcA	960
	AGAACTGAAA ATGTATGATA GAGTCTTACT GCAAATTGaT TCTACAAGAG ATGGTAATTC	1020
	TTCGATTATa TGGGGTGaTT TAGGTATTGc CAATATCtTA GTGaAATCTA CTGrACCTTG	1080
15	aGGcTAtGaa GTTTTGAATG ATTACCT	1107

## (2) INFORMATION FOR SEQ ID NO: 639:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 904 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

	ATTCATATTA TTATAAATTA TTTCTACACC ATCCCAATTG AGTTGTTTTT CATAATTTAA	60
30	ATGTAATTCC ACTAACTCCC TACCAATTC ACAAATCCA TATACATCCT TTAATATCGG	120
	TATTGCGGGA AAACCTTTAC TCAATCACT TGAATATTTG TTCACATAAT ATTTATGATG	180
35	CAAAATTGCA TATATATAAT AACTATCTC TTCTGAATTA AGATTTATTT TCTTTTTTAA	240
	AGAATTAGgA AATATTATCT ACArGCCTCA AACTATCTTT ACCTTTGtAT GTAGCAAAGC	300
	CTTkGCCATT ACCAATAAAt TGGAAATTAG GTAATATGTC CGTGATCATA GCCGAGAATT	360
40	CTTTATTCAT TCCCTGTCCT TGTATATAAA TCACCTGTCC AGTATTCTCC ATTATATTAT	420
	AATATCTACT TGGCATTTC ATAATATTTT TGTGCTACAC TATCCATTTT TTTGTAAATG	480
	GTCTATGCAT AAATTTAACA ATTCTCTCTG GATTAATTGA AATATTTTTT CCTTTAGAAA	540
45	ATTTTTGGGT AAGTCCTCGT GTCCAACtaA TaAATGTTTC ATCTTTGTTC ACTAAATTTA	600
	TACGTTCTCT TGAATCTAAG ATATCAATTA ATCTATCTAT TTCAGAATTA TAGTTATCTA	660
	CAAGTAATTT TGcATTTACT AATGCTTTTT CATTCGAAAA ATTTGTTACC CAATTATCTC	720
50	TTGCTGaATT TACTCCATTA AATkGAKCTA AATATATAGA ATTTTCAATA TCCTTGGAAT	780
	CATACATTGG TAAATAATTC CCCATAGTTT ATGTCTCGGT GATTAATCCA ATCATTGGGG	840

AAAG

904

## (2) INFORMATION FOR SEQ ID NO: 640:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 640:

15	CGATGTCTTT ACTATTAGAC TTAGCCATTG GTTTCACCTC TCCAAAAAATT GTAAATGTGT	60
	ATCATCAATA TGAAAGTTAC ATAAACTGA CATATTTCTT TAAAATATCA ACGCCATTGA	120
	TAACTTCCTG TTTTAATTGA TACGCTGTAA CAAATACTA TAGTTAGTGC TTACATGTAT	180
20	ATGTTAAAGC AAGCAGTGGT AAATGTAAAT TATAATTATT CATTAACTTT GCAATATATT	240
	AAATCTTTTA TTCATAGAAG ATAAATATCA AATCAATCAT AATTATTTGA CAACAAATAG	300
25	CTAACGATTG TTTTAATCTA CATTGGCTT ATAGCATTTT AAACCTATAC TCTATTTTGA	360
	TACAAATATAA GTGTAAAATC AATCATAAAA AGGATATTCA ATATCTGCAT CCAAGAAAAA	420
	CATTACAATT ACCTTT	436

## (2) INFORMATION FOR SEQ ID NO: 641:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 641:

40	GTTATTAAAT TCAGAGTGGT AGCAAATTAA AGTTANTCAA GAGTTAAGAT GAATTTAATT	60
	CATGAACACG TCTATTATTT TTATAATTGT AGCAAATAAA GCTTTACATC AAGGAGGTAA	120
45	TTAAATATGT TCAAAAAATA TGA CTCAAAA AATTCAATCG TATTAAAATC TATTCTATCG	180
	CTAGGTATCA TCTATGGGGG AACATTGGA ATATATCCAA AAGCAGACGC GTCAACACAA	240
	AATTCCTCAA GTGTACAAGA TAAACAATTA CAAAAGTTG AAGAAGTACC AAATAATTCA	300
50	GAAAAAGCTT TGGTTAAAAA ACTTTACGAT AGATACAGCA AGGATACAAT AAATGGAAAA	360
	TCTAATAAAT CTAGGAATTG GGT TTATTCA GAGAGACCTT TAAATGAAAA CCAAGTTCGT	420
55	ATACATTTAG AAGGAACATA CA	442

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 642:

10	CCAATTTTGG TATGAATTAT ACAGATAATT CnGCGCCCCG AGGATCATTT GCTTATTTAA	60
	ATCAATTCGG TGTGGATAAA TGGATGAATG AAGGGTATAT GGCATAAGGA GAACATTTTA	120
15	ACTACTGCCA ATAACGGAAG ATATATTTAT CAAGCTGGAA CTTCATTAGC CACACCTAAA	180
	GTTTCGGGAG CACTAGCTTT AATCATTGAT AAATATCATC TTGAAAAACA TCCAGATAAA	240
	GCGATTGAAT TGTTATATCA GCATGGGACA TCTAAGAATA ATAAACCATT TAGTAGATAT	300
20	GGGCATGGTG AGCTTGATGT GTATAAAGCA TTAAATGTAG CAAATCAAAA AGCAAGTTAA	360
	TAAATCAAAG GAGTTTTTGA TTATGGCAA ATTAGTTACT GAAAACATTT CGAAGCGGTT	420
	TAAAAATCAA GATGTATTAA AGCATATTAA TATCACTTTA GAAAATAACG AAGTTTATGG	480
25	ATTACTTGGT ATTAATGGAG CCGGTAAAAC GACACTTATG AAAATTATAT GTGGCATACT	540
	TCAACAAGAT TCAGGGGAAA TTAAATTAGA TAATAGACCA ATGACACGAA ATGATTTGCA	600
	CAAAGTTGGT TCGCTTATTG AAACACCTGC GACATATAAT CATTTAAGTG CACAAGATAA	660
30	TTTGAAAATT GTGTGTTTAA ATGAAAGCGT TGATTTCaGC GAAATTAATA GTGTTTTAAG	720
	CTTAGTCAAT TTAAATGTCG ATAAAAAGAA AAAGGTTAAG GACTTTTCTT TAGGTATGAA	780
35	ACAAAGACTT GGAATTGCAA TGGCaTTAAT TAAAAaGCCA GAAATTTTAG TATTAGACGA	840
	ACCATCTAAT GGTTTAGACC CATATGGAAT CCAAGAAGTT AGAGAACTTC TAAAATTATT	900
	AACAGAACAA GGTACTAGTA TTATTATTTT AAGTCACATT TTATCTGAAA TCCAAGTTTT	960
40	AGCAGATCAT ATCGGTATTA TTCATGAGGG TGAGCTAAAA TATCAGCAAA GAAATAACAA	1020
	AGATGAAAAC TTAGAAGAGA TATTCTTCAA AATAACGAAA GGTGATTACA AATGATACAT	1080
	TTAAAGATaG AAGGTATCAA ATTTAAAAAT TCTTTCAGTA TGTATGTTTT ATTAATAAGT	1140
45	CcGcTGGTAT TTCTTTGTTT TGCTATTTTC ACAGTCTTAT TCGCCAAAAG TAATACGGGA	1200
	ACAGCGAATA GTGTGTCACC ATATATAACT TTACTATTTA ATATTTGGCC AATTGCTTTC	1260
50	ATCCCGATIG TATTATGTAT GGCTTGTAAT TCGTTATTTA AAATTGAAAT GAGAAATAAA	1320
	TCATTTAATT ATTACTTAAG TAATAATTGG TCGATTACAA AAGAAATAAG AGCAAAGATT	1380
55	TTCATTTTAT CAATAGCATT TTTGGTACAT TGCTTTTTAG TATTTATTAT TGCTTATATA	1440



TTGATGTATG TAGTATCTCT ACCATTGATA CCGCTCAACT TTTTATTAAC TCGATACTTT 1560  
 5 GGTGTGTTTCG TATCAATATT AATAAACTTA GTATTATCAG TCATTGTGT CTTGTTTTTA 1620  
 ACATTGAAGA GTTTATTTTG GGTGTTGCCG TGGGGGATAA TGCAGAGAAT CCCGCTTATT 1680  
 ACGCTTGTA TACTACCTAA TGGCTTAGTT GTAAACCATA ATTCAAATA CTTTAATGAT 1740  
 10 CTCAATGCCT TATATATTTT GATTATTGTT AGCATCATT TTTTCGCGAT AGTAACATTT 1800  
 TTAAATAATA AGAAAAGTTG GCGATTAAAA TGATAATTAA CGAATTAAAG TCATGTAAGT 1860  
 TGAAATTTTC TAAGCAAGCG CTCACATTTG TACCCATTAT TGTAACCATA TTGTTTATAT 1920  
 15 TATTTATAAA TTGGTATTTA AACGTAAATT TATGGAATGG TCGACAAATm AGTTTGTTTA 1980  
 CAGCGAGTTT TAATGCAATT ACATCGCTAT TAATTTCTAT AAACGTCTAT CAAGTTATCA 2040  
 ATTTTGAAGA AAATATTGGT CACTTTAATC ATATTTTAGG AAAAGCTAAT AGGCTAAATT 2100  
 20 GGTAAATGC ATCAATGATT TTTACTTATA CTATTACAGC CATATGTATT CTATTAGCAT 2160  
 CAATTAATTT ATTGTGGCAT TCACATGATA TGAAAATAAC ACTTATGTTT ATAGGcGTaT 2220  
 CATGTTTTT CAATGTaATT ATATTACTGC TACTTTTTAT TTTTAGTATT TTCATTAAAG 2280  
 25 ATGTAATGGC TATTGTTGTC GGAGTTTTAA TGTTTATTTT TAACGTTTAT TTTGGATTAG 2340  
 AAGTGCTTGG AGATCATTCG TGGTCTATT TACCAATCAC ATATGCTACA CGTTACGTTT 2400  
 30 ATATGTTTAn CGAAGGGGAG TATACCAGTT ACATTAACAT TGGGCAATCT ATATnATTAT 2460  
 CACGnTGCCG AT 2472

## (2) INFORMATION FOR SEQ ID NO: 643:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 646 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 643:

45 ATAATATAGG AATTATTTTCG ATnACAGATT TTACGAATCG TGCTACGATG CAAAATGAAn 60  
 ATAAAGATCC ATATGGCGAA AAGTTAGCTT ATGGAATTGC TTTTAATGGC AGTGTGGATA 120  
 TGCAAGGGGA TAAACAAGTC ACAATTCCAA AATATAGTGT AGTTACAATT ACTGGCGAAA 180  
 50 ATAGTAAAAA TTATCGTGTT ACCGCCGATA ATAAGACTTA CTATGTAGT AAAGATAAAAT 240  
 TAGAATATTT TAACCCGGCA GGTTTATATC AAACGCATAG TTTTAAAAAA TTAGCACCAT 300  
 ATATGAAATC AAATTATAGT AATTACTATG CATACTTTAA TAGTCAATTA CATAAAAAGC 360  
 55

CACAACAACC GATACAATTA CTTTTCAATG ATAATAATCA GTTATACGGT TTTGTTTATC 480  
 CAATTGTAGA TAAAAAAGAA TTAAAAGATA AGTTTAATAT TAACAATAAC ATTTGGATT 540  
 5 CTAAAGTTGG GAATGGATAT TGTATTGCCA ATTTGAAAGA AGACAAATGG ATTTATATTG 600  
 AATTGTAGGT GTAAAGATGC TAGATAATAT TATTTTATAT TTAAAA 646

(2) INFORMATION FOR SEQ ID NO: 644:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:

20 TAATATCGGA ATTTGATAAT GAAGATATCT AATTTTTTAA TATTCGTAGC TTTTATTTTT 60  
 CTACTTATTT TATGTTTATT TTAAATCTTA CAAATGACAA ACCATTAAAA GTAGCATCCC 120  
 AACATCAAAC AAAAAACAA TTCATCAAAT AAAAATCGCT ACAAACCAA GTCATTAAAC 180  
 25 ACGCAATAAT TAAAATTTTC CACTCATTAT AATTCTGAAT TCCAAATGTC GAATTCCGAA 240  
 AACCAAATC CAAATTCCAA AAACGCAACT CCAAATTA AAGCATTTC CTACCATTCG 300  
 GGAAATGCTT TTTACATACT GgATTACTCT GTCATTAATG ATTTTACAAC GGgAAACCAT 360  
 30 GTCGtCATGT ATGACCaaAG TAGCGTCGCT AtCaTaAgGt GGTTCGGATC TTTATTGGAT 420  
 AATnAT 426

35 (2) INFORMATION FOR SEQ ID NO: 645:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:

45 nTTATTTACC CACAACATGT TCGACATTA GGTAATGGG TACCTTATTT ACTTGGTATT 60  
 GTTATGTTAG GTATGGGATT AACAATTACA CCTAATGATT TCAAAATGGT CTTTAAAGCA 120  
 CCTAGAGCAG TAATTATTGG TGTCTGTCTA CAATTCAGTA TTATGCCCCAC ATTAGCATTT 180  
 50 ATAATTGCAA AGTCTTTTCA TTTACCACCT GATATTGCTG TTGGCGTAAT ATTAGTTGGA 240  
 TGTGTCCGG GTGGGACATC AAGTAATGTA ATGAGTTATT TAGCCAAAGC TAACGTAGCA 300

55

	ATATATCTAT TTGCAAATGA ATGTTTGGAA GTATCTTTCG TGAGTATGTT GTGGTCAGTT	420
	GTTCAAGTTG TATTAATTCC AATTGCTTTA GGTATTGTTT TGCAAATTAT TAATCGTAAA	480
5	ATTGCTGAAA AAGCTTCTAC AGCTTTGCCA ATTATATCAG TTGTTGCTAT TTCATTAATT	540
	TTAGCAATAG TTGTAGGTGG CAGTAAGCAC CAAATCTTAA CTACAGGATT ATTAATATTT	600
10	TTAGTAGTTA TTTTACATAA CGTATTAGGG TATACGATTG GATATTGGTT AGCTCGTCTT	660
	TTAAAATTAG ATCGACAAGA TCAAAAAGCA GTCAGTATTG AAGTTGGAAT GCAGAACTCT	720
	GGTTTAGCTG TGTCATTAGC aGCATTGCAT TTTAATCCAA TTGCAGCAGT ACCAGGCGCA	780
15	GTGTTTAGTT TCATTCATAA TATAACAGGG CCTATTTTAG CAAAGTATTG GTCAAAAAG	840
	TTATAATTGC ACTAATAGAA TGAAGTGGTC ATCGGACTAT GTTAAGCTTT GATAAAGAGA	900
	AAAAATAGAG GAGTAAATAT ATGTATAGAG CAGTTATATT TGATTTGAT GGAACAATAA	960
20	TAGATACGGA ACAACATTTA TTTAATGTTA TTAATAACA TTTAGAGATG CATAATGCCG	1020
	ATCCTATAAG CATIGATTTT TATCGTTCTT CTATTGGAGG AGCAGCTACA GATTTGCATG	1080
	ACCATTTAAT TAAAGCGATT GGTTCCGAAA ATAAAGATAA ACTTTATGAA GAACATCATC	1140
25	TTACTAGTAC AACATTACCG ATGATTGATA CGATTATATC ATTGATGGCA TTTTAAAGC	1200
	AACGTCACAT TCCTATGGCA ATTGCCACAA GTAGTGTGAA AGCGGAAATA ATGCCACCT	1260
30	TTAAAGCATT AGGTCTAGAC GATTATATAG AGGTAGTTGT TGGTAGAGAm GATGTTGAAC	1320
	AAGTTAAACC TGACCCTGAA TTATATTTAT CTGCAGTACA ACAATTAAAT TATATGCCGA	1380
	CACAATGTTT GGCTATTGAA GATTCTGTAA ATGGTGCAAC AGCCGCGATT GCAGCTGGAT	1440
35	TAGATGTTAT TGTTAATACG AATAAAATGA CAAGCGCACA GGACTTTTCT AATGTAGATT	1500
	ATGTAGCAAA AGATATTGAT TACGATCAAA TTGTAGCGCG TTTCTTTACG AAATAGGAGG	1560
	CGTATCATGA TGGGTTACAT TATATTGTTT TTTCTAGCTG GTCCAGTAAT TTTAGGCGTT	1620
40	GGAAATTTGG TGATTGGTCC TATATTTAAC AAACAGACAC CATTTGCGGT GCAAGTAAGA	1680
	TCTTTTGTG kTGgkTcmAT GrTTTACTTA ATACTCGCAA CAATTGGCTA TTTTTTACTA	1740
	TTACAAGGTA AACTTTAACG AGAAAACCAC CTTACCTCAT TAAATGGACG ACCATATGTA	1800
45	TGTGAAATGG TAGAACGTTT ATGTTTATGT ATGAGATAGG GTGGTTTAAA TAGTTACATA	1860
	TATTTTAATA ATAACGTCAC GATGATAAGT ACAATTAAGA TAATATCTAT GCCTACCATA	1920
50	ATTGTAGCTC TTGTTGCAIT ACTTCCTTGT TCTTTTGCTG ATTTCATAGC ACGGTAGTTT	1980
	GGCACAAAGC TAATAATTAG TAAGATTAAT ACAATTACAC CAATTAATGC TGTTGTCATG	2040
55	ATGAACGACC TCCTTTATTT TTTTCAATCA ATTCCCAAAT AAACGTAGCA ATCACACCGA	2100

CAATAATTAA TGCAATCGGT AAAGTCGTAC CGAGTTTAAT CTTGCGCTCT GGAGAATTAA 2220  
 TAATAGTAAA TACTGTAAAG CAAATGAGTA TGAAAGCAAG TGTGCAATA ATAGTTCTTC 2280  
 5 CAACTAAATA TAGGATGTCA GGTTTTTCCA TACCGATATA ATTTATGATG AAAAATGCTA 2340  
 CAGCAAAGAG TACCGATATT TTTGTAGCAC GTAGCAGTAT TTGTTTTAAC ATTGATATAC 2400  
 TCCTTTTTAA TATTATTAAA ATTATATCAT AATTACCAAG AATAGCTGAA GTTGATGTG 2460  
 10 ACTCAACGGT ACTTGAGCAA CTTTTTTAAT TTTTGTAGAAA AATCACAAAA TAATTGTTTG 2520  
 CAAAGTTGCA AAAGCCTGCT ATAGTAGTTC TGTAACGAT TGCATGGTAT GCAAATATTA 2580  
 ATGTACCAAA ATCGATAATT TATAGTATAA TTACGGCAAT AAGTTTTTTT ATGGATTTAT 2640  
 15 TTAGTATCAA TCAGAGATGG GGTAAGAAGT TATGGAGAAC AATGAACTAC AAAGGGGATT 2700  
 GAGTGCCCGT CAAATTCAAA TGATTGCACT TGGTGGTACG ATTGGCGTGG GGCTTTTCAT 2760  
 GGGTGCGACA AGTACAATTA AATGGACAGG CCCATCAGTT ATCCTTGCAT ATTTAATTGC 2820  
 20 GGGTATCTTT TTATTTTTAA TCATGAGAGC AATGGGGGAA ATGATTTATT TAAACCCTAC 2880  
 AACAGGATCA TTGCAACAT TTGCAAGTGA TTATATACAT CCTGCAGCAG GTTATATGAC 2940  
 AGCATGGAGT AATATATTCC AATGGATTGT AGTTGGTATG AGTGAGGTCA TCGCAGTAGG 3000  
 25 AGAATATATG AAGTTTTGGT TCCCGGAATT GCCAACTTGG ATTCCTGGTG TTATTGCTAT 3060  
 TTTATTATTA ATGGCAGCGA ATTTATTCTC GGTAAGCG TTTGGAGAAT TTGAATTTTG 3120  
 30 GTTTGCTTTA ATTAAAGTTG TAACAATTAT TTTAATGATT ATTGCTGGTT TTGGTCTTAT 3180  
 nnTCTnTGGT TTTGGAAATG GTGGCCATGC GGTAGGTATT TCTAATCTAT GGACAAATGG 3240  
 C 3241

35 (2) INFORMATION FOR SEQ ID NO: 646:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1311 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 646:

AGGCGTCAAC TCAGATGGTT TAATAATTGC CGTATTACCT GCTGCAATAG CACCGATTAA 60  
 AGGTtCGAaC ACTAGTtGAA AAGGATAGTT AAATGGTGCA ATGATCAAAA CTGTTCCATA 120  
 50 AGGTTCTTTT TTGATATAGC TTTTGTGG AAATAAATAT AAAGGTGTGT CTACATTkTT 180  
 TGTTTTAGTC CAGTTTTTAA GTTCtTTACG GGCAATTTTG ATACTTyTCA AAGTTATGCC 240

55

AATATCGCTC TCGTATGATT TAATAGCTTT GCTTAACTTC TTTAATTGCT CTTTTCTAAA 360  
 ACTAATATCT TTAGTTTGTT GTGTATTGAA AAAAGCTTTA CTGTCATAAA ATTTTTGCTC 420  
 5 AATGATATTC ATAATGAAAA GAACCTCCTT ATATGATTAT TTTGGAAAAA GCGATTAATT 480  
 GATTTGAATG TTGTGGCCGT TAATTTTAAA TGGTCTTTCG AATTATATAT GTTGAAAGTT 540  
 GAAAATAGAG CGATGAATCG TGTACATAAT AATATTTATA ACTTTAATCA TAACGAAAAA 600  
 10 GGTAGGAAGA AAACAAAAAT TTATACTCAA CATCGCAAAT ATTTTAAGAA AATGTAAAGA 660  
 CAAAAGGGGA ATTGTATAGA AATCACTAAT CTGTGGGTTA GGGTAGCTAA AGGAATAAAA 720  
 ACTACTATTG AAAAAGGGTT GTAAATTAGT CAAACGTAAA TAAAAAACAG TTCATTGAAA 780  
 15 GTGAAATAAA TTCTACTTTA ATGAACTGTT AGTTAAATAC AACATGTCTA TAATTAGACA 840  
 GTAATATAGT ATTATTTTGT TAATGCTTCA GTGATTTGAG GTACGATTTG TTTTTTTCGA 900  
 20 GAAACGACAC CAGATAAGAA GGCCATGTCA TCTTCTAATT GAACATTGAA TGtTCGCCAA 960  
 CTTTATCTTT TTCAGCACCT ACAACTAAAA TTTTAGAATC ACTATTAATG ATGTCAGTAA 1020  
 CAACAAGTAC AAATAAGTCA TATTTTTCTT GTGCACTTAC AGCTAACATT TCTTTTTCTA 1080  
 25 rATCTTCTTT ACGATTTAAC ACTTCGTCAA GGTCAACAGC ATTAACCTGT GCAATACGAG 1140  
 TCACATAGTC ACCCATAGTA AATGATTTAG CATCCATGTT TAATAAGAAT TCAACTGATT 1200  
 TATCAGTTGT TGAAGCACCT GCTTTtAACA TATCTAAGCC GTACTTTTGA ATATCAACTT 1260  
 30 TAGCAATATC TTTNaATTCT tCAGCTGCTT TAACATCTTG TTGTGTACAT G 1311

## (2) INFORMATION FOR SEQ ID NO: 647:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:

CATATACTTT TTCATTTCTT TACGAGATAC TTTACCAGAG GATTTAGACT TCATACGCTG 60  
 45 ATCCATATGT GCTTGCGTTT CAGaATGTCC ACAAACACAA CGATATACCG CTCCTTTCCC 120  
 TTTACCAAC AACGTTAATT TCTTTTTACA GTTTGGACAT CTGCAATTG TTTTGCGCTG 180  
 TACATTCTTT TTCGTCTTAC AAGATGGATC TTGGCACACA AGCATCTGAC CATTTTTAGT 240  
 50 TTTAACTTTA ATCATGAATT TACCACACGT TGGGCATTCT GTGGTTGTTA AATTATCGTG 300  
 TTTATATTTA CGATCACTAT TTTAATCCC ATTTACAACA TCTTTCGTAA AATCTTTCAT 360

CCATTGTGcA GTTAAAAGTG GCGACGTTAA TTCTTCTGGT GCTAATTCTA ATATTTGTTT 480  
 ACCTTTTGAC GTTACTTTAA TTTTACCGTC TCTTGATTCA ATGGCATTCA TATTAAATAA 540  
 5 TTTATCGATA ATGTCGGCCC TTGTTGCAAC TGTGCCGATA CCACCTGTTT GTTTTAAAGT 600  
 TTGCGCATAT TTTTATCCT TCAATTGAAT AAAGTTCTGA GGGTTCTCCA TCGCTTTTAA 660  
 TAACGAACCT TCATTAAAAT ATTCTGGAGG TGTGTTTCA TGTCTCTAA TATTTGTTTT 720  
 10 TGAAATCTTC ACTTCATCGC CTTCTGAAAA AGGCTGTTGC ATCTCTGTAA TAGATTCAAC 780  
 TTGTCTAATA GATTTAAAAC CTAAAACAGT TGTTACATTC TCTTTCAAAA CAAATGTGTG 840  
 CCCTGCAACC TCTAAAGTTA CAGTTATCGC GTCATACTCG TCGGAGGCA TTAAAGCTTC 900  
 15 TAAAAAACGC TCGACAATCA TATCGTATAA CTTTAATTCT CTATTACTTA AGTCTGACAT 960  
 GACAGGTCTC ACTTCTGTAG GAATAATTGC ATGGTGATCA GATACTTTTT GATTATTAAA 1020  
 20 TATCGACATT TTTGATGAAA ATGTTTTAGA CATTAAATGGG CGTGCTTGGT CTTTATATGT 1080  
 TGTGCCATC GTCACCTGAA TACGTTCTTT CATAGTATCT ACCATATCAG TTGTAAATA 1140  
 GTTTGAATCT GTTCTTGGAT AGGTTACGAC TTTATGTCTC TCATATAAGC TTTGAAGTGT 1200  
 25 ATTCAATGTT TCTTTAGGTC CAATTTTATA ACGTCTATAC ATATCTTGTT GTAAATCTGT 1260  
 TAAATTGTAC AGTGATTGCG GATACGACTT CTTATGTTTA GTAGCAACAG ATTTAATCTT 1320  
 ACCATCGACA TTTTCAAAT TATTAACCAT CTGTTCTAAA GTTCTTTTAW TGGtATATCG 1380  
 30 CTGATTTGaw TCTAGCTGAA AATCAAACCC TTTTACCGTT AATGATAATG TAAAGTATTG 1440  
 TTGTGGnTTG AACTGATTAA TCTCTTGTTG GTCGTGTAAT TTAATAAATT GAAACGGn 1498

35 (2) INFORMATION FOR SEQ ID NO: 648:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1044 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:

TAAAACAATT CGTTTTATTA ATACAGTTTG TAAAAGTATT CTCTTAGTAC TAATAGCTAA 60  
 TGTAATGATA GAAAATACTA GTGTTATTAA AGATTTGAAT AAAATAAAAG AACTGAGAA 120  
 50 ATATTGGAAT GTATTAGATG ATTATTACAC GATTGAATTT GCACCTTATC ACGAAACAAA 180  
 ACAAGTTTG ATTGATAATA TGGTGCGATC AGAACAATTA GTAAAGGCTA GTGAAGCAGA 240  
 AAATAATGCG ATTTTATTCA AACCAAAGGG TGAATCCGTT GACAATGACA ACTTTTCGCC 300

TCAACCTGAT ATTCCGATAA AAAATCAAAA AAATAATGTC GAAGTAATTA TTCCACAAAA 420  
 GTTTCATGCA ATGCGTAATG AAATCAATCA AGCATATCAT TCATGGTTTG AATTTGTACA 480  
 5 AAATAAAAAT AATAAAGAGA ATAAGTTATC TATACAGTTT ATCAACAAAA ATGATTGTCTG 540  
 AATTTTTTCA TTTGATGCAC GAGATAGTCG CCATTTGTCA TTTATAGAGG CGCCAATCAT 600  
 TGTGAATGTT CAGGCATCAG ATTTATCGaA TGATTTtAT TATGCCATGa TCaGTCaAGG 660  
 10 CGGGTATTTa TTCaAAAATT ATGaCGCGCT AGTAAAAAAT ATTGGAAAAG TATCCATCTT 720  
 GATGGGGAAA TCCAGTGGAA TAACCAATTA TAAAGATAGC GTGATGGAAA TGTATCATGA 780  
 AAACAATTTG AAATTAACAG TACTCAACTT TTCACAAATC ATTATCGCAA TCATTTTAAT 840  
 15 AATTATTATT TTATTTGATG TGAAATATTA TTTGAACAG CATCGAAAAT TACTCGTAAT 900  
 CAAAAAGCTA TATGGTTATT CAACATTAAG AGCCAATTAC CAATACTTAT TAATAAATAA 960  
 20 TATAGTTGTT ATTTTTATTG GAATATTGAC GAATGTAATT TTACATTCTC ACTATATAAT 1020  
 GATGTTATTT GCAACGATTc TTGT 1044

## (2) INFORMATION FOR SEQ ID NO: 649:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:

GAACATATTG GGTTATGCAA GGnGGTCACT CTTCACACTT ATAAACAACA TTTTAATAAT 60  
 GTAAAGTTTA ACCAGCTAAC ACTTTTGTTA GCTGGTTTTT ATTTTCCTTC AATTTTAA 120  
 TGGTTAAGTC CCCTTCTATA TCTTATAAGA CAATCATTAT AATCAATTCA ATTAATACAT 180  
 40 TAACAACCAC AACTAATAAA TATAGTAACT TCAAAATCCA TATTTATGTC TAAAGATAAT 240  
 CTCAATGTTG TTCACGTCAA TAAAATTATC CCTAGGTTTT TAAAAATTGT ACATGTTTAA 300  
 ACAATCAAAA GTGTACATTA TTAAATTATC ATTTCCAGTT AGATTTAGAA AACATTCA 360  
 45 CCACGCATGG ACCAACGTAT TCGTCTTcAT TcATTTTAG 399

## (2) INFORMATION FOR SEQ ID NO: 650:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 650:

GTACTAGGTT CTAnGATTCC CTACTGTAGT CATAGATATT TTCCAAACAG AGCCTGACAA 60  
 5 CTTTTCATTT TTAATAGTGA TCACTATATT AATCGCTATT GCAATTTATG CATGTCGATT 120  
 TGT TTGGGTT TATTTCTGGT ACAAAGATTT TTATTTCCCG AAAAATATAC AATCTTATCT 180  
 AGACGAGGAA CATGATTCAC ATGAAACACC ACCTTCTCGA GTGCGTTACG CATTTATTAT 240  
 10 GACCATGTGT GGTATTCACG GTACAATTTT ACTTTCAATG GCACTTACAT TACCATTTAT 300  
 CATTACAAAA GGACAAGCAT TCGAATACCG TAATGATTTA TTGTTTATTG CATCTTTCAT 360  
 GGTATTAATT AGTTTAATCT TAGCGCAAAT TGTTTTACCT TTAATTACAC CATCTGCCGA 420  
 15 AGATACTACT TTAAAGGTA TGA CTATCA ATCTGCCAAA ATTTTCATTG TTCAAAAAGT 480  
 GATCCAGCAT TTAAAAACG AAAGTAAAAA AGACAAAAAC GATACAAATT ATCGCCCAGT 540  
 20 ATTAAACCAA TACTATGGAG AATTGTTATT TTTATTAAAT TCAGAACCTG ATAATCAAAA 600  
 TACrAAAGAA CTCAAACGTT TAGAAGATAT TGCAAAAGTA ATCGAAACAT CTACACTTGA 660  
 GCGTTTAATT GATAAAGGTA AGGCAACATA TCAGGATATT AATAATTACC GCAATATTGT 720  
 25 CGAATTAACA GAGACACACC GTACTGC 747

## (2) INFORMATION FOR SEQ ID NO: 651:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1373 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:

ATACAATACT CTTTATTAT TCAATAAGCC ACTTCCTATA GCAAATGTTT AACTTTAAAT 60  
 40 ATTTTTCGAT GCTAACAAAA AATCACACTA TCATCTTTTA AAATGAAAGT GTGATTACAA 120  
 GCAAATCTGT AAAATTTATA AAGCAGAAAC AATTCAACTT TATCATTATG ACATTTCAAT 180  
 TAAACCTTCT ACATTATAGT TCCAAGCATC TTACACATGA ATGCAAGTAT TTAACGATTT 240  
 45 AATTGTGACA TAGCCTGTTG ATATTGTGTT TCATTGATAT AATTTTGTG CTTCAATTTT 300  
 TCTAAGTTTCG TGCTTACACG TTGCGTAAAA TTCTCTGACA TATTATTGAT ATTATATACG 360  
 CTAGGTGCAT TGACTTTACT AGCTAAAATA GCGCTTTGTA AACTGTTAT GTGAGACATT 420  
 50 GTTGTACTAT TTTTATTCAC GGTGTTCCA AAGTAATGGT TTGCTGCGCC CTCAAGCGTA 480  
 TATTGATTAT CCCCAAAGTA AATATTATTT AAATAAAAGC TTAAATTTT GTTCTTATTA 540



TCATTATCAT AAAAATAATT TTTGACAACT TGTGTGTAA TGGTACTACC ACCTTGACACA 660  
 TCTCTGTCGC TAATCGTTGA AAATAAAGCT CTAGTTGTAC CTTTCAAATC GAATCCATGA 720  
 5 TGATTGTAGA ATCGTTCATC TTCCATTGAA ATAAAGGCAC CTTTAACATA CTCTGGCATG 780  
 TTATCAGCTG ACACAAAACCT ACTTTTATTT TCAATTTTTTC TTAGTTCATC CACATTATCG 840  
 CGTGTAGATA AAAAATACAT GATACCAATA AACAAATGCGA TAATGATTAG AATGGTTAAT 900  
 10 AATATTTTTTA ATAGTATTCG TTTACTTTTT TTCTTTTTTCG GCGGTTTGCC AACTGGTTGA 960  
 TAATACGTAT TATAGTGAGG TTCGTGTTTC ATATGCTCAA AATGTTTCATT TGAGTTTGAG 1020  
 15 TACCTATCGC TTCTTTTCAT GCGTTTGCTC CTCTTTTAA AACTCACTTA GtATATACCT 1080  
 TGaGTTTACC AGTACTATCA CAAATAGGCT ACACTTTTTG GGAAAATCAG TCCAAGGGCT 1140  
 TACAATCGTA TACGCCATCA TACTTACTTT TTTGTTTTTT GAAAAAATTA TAGATAAATC 1200  
 20 ATTGCAATTT TAAATATTAA TCATGTCAAA TATTGTTATA TTTTATAAAA ATAAAAGACC 1260  
 ATCCCTATTA AATGCCAATA GAGACGACCT TTTATTTGTT ATTCAATTTAT TAAAACTAAA 1320  
 ATCCATATTT CATTTCAAAC GAAAATATAT AAATTTTAAC AATCGrTAAC CAC 1373  
 25

## (2) INFORMATION FOR SEQ ID NO: 652:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 859 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:

GGCAGATAAT TTAGTCATTG TTGAATCGCC TGCAAAAGCA AnAACCATTG AAAAGTATTT 60  
 AGGTAAGAAA TATAAAGTTA TAGCTTCAAT GGGACACGTC AGAGACTTAC CAAGAAGTCA 120  
 40 AATGGGTGTC GACACTGAAG ATAATTACGA ACCAAAATAT ATAACAATAC GCGGAAAAGG 180  
 TCCTGTTGTA AAAGAATTGA AAAACATGC AAAAAAAGCG AAAAACGTCT TTCTCGCAAG 240  
 TGACCCCGAC CGTGAAGGTG AAGCAATTGC TTGGCATTTA TCAAAAATTT TAGAGCTTGA 300  
 45 AGATTCTAAA GAAAATCGCG TTGTTTTCAA CGAAATAACT AAAGACGCTG TTAAAGAAAG 360  
 TTTTAAAAAT CCTAGAGAAA TTGAAATGAA CTTAGTCGAT GCACAACAAG CGCGTCGAAT 420  
 50 ATTAGATAGA TTAGTTGGCT ATAACATCTC GCCAGTTCTT TGGAAAAAAG TAAAAAAGG 480  
 GTTGTGACG GGTGAGTTC AATCTGTTaG CmTTCGTTTA GTCATTGACC GTGAAAATGA 540  
 nATTTCGAAAC TTTAAACCAG AnGAATATTG GACTATTGAA GGAGAATTTA GATACAAAAA 600  
 55

aAAAGATGTT GAGAAAATTA CAGCTGCATT AGATGGAGAT CAATTCGAAA TTACAAACGT 720  
 GACTAAAAAA GAAAAAACGC GTAATCCAGC AAACCCATTT ACAACTTCTA CATTACAACA 780  
 5 AGAGGCGGcA CGTAAATTAA AcTTTmAAGC AAGAAAAACA ATGATGGTCG CACAACAATT 840  
 ATATGAAGGT ATAGATTTG 859

## (2) INFORMATION FOR SEQ ID NO: 653:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:

20 TTCAACTTCG TTTGGAAATC ATGTTCTCTCA ATTGTTGGAC TTAAACGAAT TTCTTTAACA 60  
 TTGATAATTT TTTGTTTCTT TTTCAATTTCT TTTTCTTTTT TCTGTTGTTC GAATTGAAT 120  
 TTACCGTAAT CCATAATTCT TGCAACTGGT GGTTCGTCAT TCGGTGCAAC GACCACTAAG 180  
 25 TCTAAATCTA CACGTTTCAGC CATTTCTAAA GCTTCACGCT TTGATTTAAC ACCAATTGT 240  
 TCACCATCTT GACCGATTAA ACGTAATTCT TTTGCACGAA TTTTGTCATT GATTTGAGTT 300  
 TGATCTTTTG CTATGGTTGA CACCTCCAAA ATTTTACGA AATTGTCACC AAGCAAAAAG 360  
 30 GAAGAGCAGG TATAAAATAC CCGCTCTTCC TTATACACAG TTATGTGTAA TGTGATTAAC 420  
 CTGCCAACTG CTTTATGCGT CGCTACAGGT GAGAAGCGGG TGCTTCTACT TGGTTCGTTT 480  
 CGTATTCAAC GTTATTAATC ATATCAACAA TTCACATTTA AGTCAACACT ATAAGTGTAA 540  
 35 TTATTTTTAT TTTAACCTTT TATTTTCATCC ATTGACACGT CTTGACGTAA ATCTACTTGT 600  
 TCTAATGGAA TTTTTTTCGT TTTATATCGA AGCTTATGAT AAATAAAGAA TGCTAAAAAT 660  
 40 ACTGGAATTC CCATATACGT AATTAAGAAG CGACTAAAAT TAAATCTCC TGTnTTAATA 720  
 AAGTCAACAT CTTGCCCAAn AAnTACT 747

## (2) INFORMATION FOR SEQ ID NO: 654:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 501 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654:

TTGTGCTTCT TTTTAGCTT CTGAACCTC TTGTGCCTCT TGTGATGTAT CACTYAAATT 120  
 ATTTGCACTT GCTTCTTCTT TTATCGCTGC TTGTTGTGCT TTCAATGCCA CTGCTTTTGr 180  
 5 TTCTTYATTT GATACAGCCA CACTTTTATC CGCTTCTGCT TGTGCTTCTC TTTTAGCTTC 240  
 TTGAATCTCT TGTGCTTCTT GTGATGTATC ACTTAAATTA TTTGCACTTG CTCTTCTTT 300  
 TATCGCTGCT TGTTGTGCCT TTAATGCCGC TTGCTCATTT TTAGATTGT TAAAAATCC 360  
 10 TTCAACACGT TCTTTTGTAT AGGCAACCGT TTCTTCAAGT TCGTTTTTTC TTTCTTCAAA 420  
 CTTTTGCGAC AGTTCTTGTh CTTTGACTTT NAAATCATCT GCTTTTTGAT AAACCTTATT 480  
 15 TTAATAATACC AACCTAAAGC C 501

## (2) INFORMATION FOR SEQ ID NO: 655:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655:

CACCTTGTC TAATTAATTT TTTGATTTTT CATTTTACTG ATAATAGGTT CAGCATTAAT 60  
 CATGATTTAA CCTCCACAT TTAATCATT ACTTCTATTA TATATGATTC ATATTAAATG 120  
 30 TCAGTCAAAA AAGTTAGAAA TTCATTTTAA TGCATTTATA TTTCGAAAAT CCCTTATGTA 180  
 TCTAAAAGCA TTTTTTAAAC TTGAATTTTA AAACACTAAA CAACACATAC GTCTCTGTGT 240  
 35 CATTTTCATT TTTTGTATGT CATATATATG TTTACTTCAT TTAAATCAAT TTCATCTTAT 300  
 AATTTATCGT GTATTTTACA AAAGATTGAC TTCAATTCAT CGTAAAAGTT ATACTTTTGC 360  
 CATTTTTTAA TGTAACATGG TGTTAGTAAT AAAAATAATA CATTGAGGTG TTTTACATGA 420  
 40 CAGCATTATT CCCTTATATC GCTTTTGAAA ATTCAAAAGA AGCCCTTGCA TATTACGAAG 480  
 AAGTATTTGG TGCAACTGAC GTTAAACGTT TAGAAGTTGG CGAAGAACAA GCGTCACATT 540  
 TTGGTATGAC TAAGGAAGAA GCGCAAGAAG CAACTATGCA TGCTGAATTT GAAGTGCTTG 600  
 45 GCGTAAAAGT GTTATGTTCT GATTCTTTTG GTCGCGCTGA CAAAATTaAT AATGGCATAT 660  
 CATTATTAAT TGATTATGAT GTTAACAATA AGGAAGATGC TGATAAAGTT GAAGCATTCT 720  
 50 ATGAGCAAAT TAAAGATCAT TCTTCAATTG AAATAGAATT ACCGTTTGCT GACCAATTCT 780  
 GGGGTGGCAA AATGGGCGTC TTTACCGATA AATACGGTGT TCGTTGGATG 830

## (2) INFORMATION FOR SEQ ID NO: 656:

- (A) LENGTH: 539 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10 GTATCCATGG GCCCGTTnCG CACAACATTT GGnACAATTA GGTACACGnG TTGTCaTCGG 60  
 TCGTTTCGGT ATAATTTTAT CGAATGaAGG CCGTGCGTTA CAAACAATGA AACTACCATA 120  
 CGAATATTAC ATTGGTGGTA AATTAGGTTT TGGTCAACAA TGGTATTCAT GGATTTCATAT 180  
 15 CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT 240  
 TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC 300  
 TATGCATAAG CCTCATGAAA CTGCGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA 360  
 20 AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG 420  
 aTTCCAATTT AAATATAGTA ATTTAAAAAT GGnACTTGAA GATTTAATTA AAGAATAATC 480  
 AATACCATTA ATGAGCATTG GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT 539  
 25 (2) INFORMATION FOR SEQ ID NO: 657:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

35 ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GAATTATAT TTGGCAGCAC 60  
 AACGTATCGT gATGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA 120  
 40 CAATTAAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA 180  
 ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA 240  
 ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA 300  
 45 ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTTGA AGGCTAGATT AAAATCGCTC 360  
 AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT 420  
 50 AAAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTTTGATA TGTATTTTAT 480  
 AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA 540  
 GCTCTCGTTT AACTTTATTT ATCCTCGAA CTGACGTTTC AGTTAAACCC AAAATAGCCT 600  
 55

CTGGTTCAGA AAGCTTTTGA TTAATTTGGA CTTTAAAGTA TTCCCAATTA TAATTCTTCA 720  
 TGATTtTCTT ATTGGATTTT GAATTTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG 780  
 AACAGTCATC GCATTTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT 840  
 ATGCATATCT TTTAAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT 900  
 CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTT AAACTTTCTA GTTTTATCtT 960  
 TAATAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT 1020  
 AGTTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTGT 1080  
 GAATCCATTG GTTGAAAAAA TGGGAA 1106

## (2) INFORMATION FOR SEQ ID NO: 658:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

TTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA 60  
 TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTTCGCA GTTTAATCAA 120  
 AACCACATAA AGCTTTTAAC TTTACTCTTT GATTTTAAAGA GTGATAAATG TTTACAGTTT 180  
 AATTAAAACT GCATAAGAAC TTCTAGCTTT TCTCTTTCGT TCAAAGAGAA GCAGCTGTTC 240  
 GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTTAA AGAGTGACAA 300  
 ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA 360  
 GAAGTTCTAA TACCACCATA TCGTGCGATC GGAACCGTA 400

## (2) INFORMATION FOR SEQ ID NO: 659:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1899 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTTCAAGTTT AGTCATCATT 60  
 TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA 120

	AAC TT T T A A C T G A G C T T C A T G G G C A C C A G G T T T T G A A G A A G A A G T A A A A A A T T A T A T G A C	240
	T C A G C A A A T G G C G C C G T A C G T A G A T G A A T T T A T T G A A A A T C G T A T G G G T G G A T T T T T T G G	300
5	T G T G A A A A A A T C T A A A A A T C C A A T G C A A A A C G T G T A A T G A T T G C A G C A C A T A T G G A T G A	360
	A A T C G G A T T T A T G A T T A C A A A T A T C A C T A A A A A T G G A A T G A T T C A A T T C A C A A T T T A G G	420
	T G G T G T T G C A A A T G A T A T T T G G C A A G G A C A C G C T T A G T A A T T A A A A A T A G A A T G G C G A	480
10	T A A A A T T A T C G G T G T T G T T T C T A A T A T A C C T A A C A T T T T C G T A C T G G T A G T G A A G G T G C	540
	A C C G G A A A T T A A G A T T T A A C A T T A G A T A T A G G T G C T C A A A A T G A A G A T G A G G T G C G T G A	600
	G C G C G G A A T A G A T A T A G G A G A T A C A A T T G T A C C T C A C A C G C C A T T C A C A C A G T T A T C T G A	660
15	A C A T C G A T A T A G T G C T A A A G C A T G G G A T A A T C G T T A T G G T T G T G T C T T G G C A A T T G A A A T	720
	A C T A G A A T T A T T A A A G A T A T A G A A T T A G A T G T A G A C T T G T A T G T T G G C G C A A A T G T T C A	780
	A G A A G A G G T T G G A T T A C G A G G T G C G A A A G C A T C T G C A G A G A T G A T A G A C C C A G A C G T T G C	840
20	A T T T G T A G T T G A T T G T T C A C C T G C C A A T G A C G T T A A G G A A A C C A A C C A T T A T C T G G T G A	900
	A C T T G G T A A A G G G A C G T T A A T T C G C A T A A A A G A C G G T A C A T G A T T T T A A A G C C T G T A T T	960
25	T A G A G A C T A T T T A T T A A A G T T A G T A G A A G C A C A T G A C A T T G A A C A T C A A T A C T A T A T G T C	1020
	A C C A G G T G G A A C A G A T G G T G G A G A A A T T C A T A A G C T A A T A T T G G T A T T C C G A C T G C A G T	1080
	T A T T G G T G T A T G T G C A C G A T A T A T C A T A G T A C A G A C T C A G T A T T T G A T A T A A G A G A C T A	1140
30	T T T T G C A G C T A G A T C T T T A C T T T C A G A A G C C A T T T G T A A T T T A G A T A A T A T C A A A T A G A	1200
	A A C A T T A C A A T A T A A A T A A T C G G G T A A T A A C A A C T A T T A T C T C T A A A T A G T T A T A T A T A A	1260
	T C A T T A A T T A A G G A G A C A T A A A A T G A A A C A A C T T G A A T C A G A A C A A A T T G A A T C T T	1320
35	T A A A C A A G G T G C T A C A G T A T T T G A A T T C A C T G C A G G C T G G T G T C C A G A T T G T A G A G T G A	1380
	T A G A A C C A G A T T T A C C G G A A T T A G A A G C G A G A T A T C C T A T G T T G A C T T C G T A T C A G T A G	1440
40	A C C G T G A T A A A T T A T G G A T A T T T G T A T T G A A A A T G G T A T T A T G G G T A T T C C A A G T T T T C	1500
	T A G T A T A T A A A A A T G G A G A A C T G C T T G G A A G T T A T A T T G G A A A A G A A C G A A A T C A A T T G	1560
	A A C A G A T A G A T G C A T T T T T A G C T C A A T A C G T G T A A T T T A G A C T A G A G A A A A C G G G G T A A	1620
45	T A C T C G T T T T T C T C T G T T A C T A T G T G T T G A T T T A T T G T A A A C T A T T A T A A G G T G C G A A A T	1680
	T A G G A G T G T T A C A T A T G A A T A C C T T T C A A A T G A G A G A T A A A T T A A A G G A A C G T T T A A G C C	1740
	A T T T A G A C G T G A T T T T A A A T T A A T C G T G A A G A A G A A A C T T G C G T A T T T A T C G A A C A G	1800
50	A T A A T A A C A A A G G T A T C A C G A T T A A A C T T A A C G C T A T A G T C G C A A A A T A T G A A G A T A A A A	1860
	A A G A A A A A T T G T A G A T G A A A T T G T T T A T T A C G T T G A T G	1899

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3774 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10	GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA	60
	TGTTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA	120
15	TTGTTTGAAG TGAGTATCA CTGGATTGGT ATTAAACAAT GTAAAGGAGA GATTGCAAAT	180
	GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA	240
	GTTTATTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAAGT TATTAATTTT	300
20	TAAAATTAAC GGTTGTCATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG	360
	TGTAAACAAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTTAGATT TATTTACTGA	420
	TCAAGAAAAA GTGACGCTTG AATTTGCAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA	480
25	GTTTGAAATT ATTGACCGGC TAAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT	540
	CTTTGTTGTA AACCAAATTA ACGGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA	600
	ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT	660
30	ATACAGGTCA AATCTTGTAT AGTGGCATT TAATTTATCC CTTTGAATAC TGTTATTTAA	720
	CGAATATCGG TCCACCTGGT CCAACAGGGA TACCTAATAG GAACCAAATG ATGACAAATA	780
35	CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA	840
	GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA	900
	TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG	960
40	GATGAAAGCC GATAAGGATT AACATTGGTA CGAATATCGG TCCTAAAATA CCCCATTTAG	1020
	CCGATGCGCT TCCGATTAAC ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA	1080
	ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA	1140
45	AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AAACACAATA ACGATAAATG	1200
	TTCCCATGTA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTAAATTT	1260
	CTTTGCTTAA AATCCCATAA ACTAATCCAG GTACTAAAAA TACGACAAGA ATAATTAATC	1320
50	CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTAGCA TTTCTTAAAA	1380
	AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAAATAAT TGTGACTATG AAAGTGATAT	1440

	CATCATGCAT TAAACTGTCA TCATATTTTC CTAATCTAGG AATAATGAGC TTAGTTGTAA	1560
	CTAGCAATAT CGTAGGAAGT AATACAACGA CACTCGCTGC GATAAAGTAC CAGTTCATAG	1620
5	CAACGTTTGT TTTAATAGAA TCTGAAACGA TACGTGTTGC CGGTTCTGTA AATGAATAGA	1680
	CCAAAGCATC TTGCATACCA ACAACTATAT TTGCTGCAAA TCCTCCAACA GCGGAAGCAT	1740
	ATGCCATCGT TAGTCCAGCG ATAGGGTGAT AGCCAATTTT AATAAAAAGC ATTGCTGCAA	1800
10	GCGGCGGCAA GATAATTGTC GCAGCATCGC CGGCTGTACT ACCTAAAATA CCAATTAATA	1860
	TAATAGTCGG TAAAATTAAG AAACGTGGTG CGCGATTAC AACAGAAATC ATTAACCTAT	1920
	CGAAGTATCC TGTTTTCTCT GCAACACCAA TACCAATCAT CACTGCTAGT ACTAAGCCTA	1980
15	ATGCTGGGAA CTCTGAGAAA TTTTAAATCG TATCATTCAT TATCATCGTA AATCCATCAT	2040
	GGCTAATTAT ATTTTAAATA TAAATGGTTT GATGCGTACC TGGATGCTTA ACAGATACAT	2100
	TAAATAATGA GATAACCCAT GTCATAATGG CTAAGCCCAC ACACATTAAA AAGAATAAGA	2160
20	CGCTAGGATC TGGCAATTTA TTTCCGATTT TTTCAACACT ATTCAAGAAA CGATTGACGA	2220
	TAGACCCCTT TTGTTGATGT TTTGATGTCA TCAATTATTC CCCCCTTTGT TAAATATTTA	2280
25	AAGTGTAACA AAAAATACTC TCAAAAGTAA CAATTTTCAG GAAATAAAAA AACTAATATT	2340
	GTTAAATATT TTGAGTTATT CAATAGAAAG TGTATAGCAG AGTAGTTAAG ACTGCCTGAA	2400
	GACTTATCTA TTAGGTTTAT GAAGCATCGA ACAGTGGAAG ATAAGGACTG TAAGTTTAAG	2460
30	ATATGTTGTA TAGGAGTGAC TGAATGAAAC GTTTGGAAAA TAAAGTAGCA GTCGTAACAG	2520
	GAGCAAGTAC AGGTATCGGT CAAGCTTCTG CAATCGCTTT AGCTCAATAA GGTGCGTATG	2580
	TATTGGCGGT AGACATAGCT GAAGCGGTAT CGGAGACTGT CGATAAAATT AAAAGTAATG	2640
35	GTGACAATGC GAAGGCGTAT AATGTGGATA ATGCAAGCGA ACAACAAGTG GTAGACTTTG	2700
	TGTCTGACAT AAAGGAACAG TTTGGAAGAA TCGATGTGTT GTTTAATAAT GCCGGTGTGG	2760
	ATAATGCGGC TGATAGAATT CATGAGTATC CAATAGATGT GTATGACAAG ATTATGAATG	2820
40	TAGATATGCG TGGGACATTT TTAATGACGA AAATGATGTT ACCTTTAATG ATGAATCAAG	2880
	GTGGCTCTAT TGTTAATACG TCTTCATTTT CCGGACAAGC AGCAGACTTG TATCGCTCTG	2940
45	GATATAATGC TGCGAAAGGT GCAGTGATTA ATTTTACAAA ATCAATCGCA ATTGAGTATG	3000
	GCCGTGATAG CATTGAGACC AATGCGATTG CACCAGGTAC AATTGAAACC CCGTTAGTAG	3060
	ATAAACTGAC AGGTACGAGT GAGGATGATG CAGGTAAAAC ATTTAGAGAA AATCAAAAAT	3120
50	GGATGACTCC GCTGGGACGT TTAGGTAAAC CAGAAGAAGT TGCTAAATTA GTAGTCTTCT	3180
	TAGCATCTGA CGACAGTTCA TTCATAACTG GAGAGACGAT TCGAATTGAT GGTGGTGTGA	3240

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AATTATTTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360  
 TATTGTGCGCA ATGAAAGACA TTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420  
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTAACGTA TTGTAGGTCG TGCATCTAAT 3480  
 TTATCAGAAT CTCGAGTTCA AACTTTTGGG GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540  
 10 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTTAG ATTGCTATAT 3600  
 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATTCCGTT 3660  
 AGTTTATtAT tATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTC 3720  
 15 ATTtAAAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

## (2) INFORMATION FOR SEQ ID NO: 661:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1078 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGG GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCaAAA 60  
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATCnG CCTTCAGAGG AATCATGATA 120  
 30 CGAGGAATAA GAAATTTAAA TGTGAGCGAA GTCAATATAG TATTGCGAT TATTTTTATT 180  
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240  
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300  
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTATT ATAAGAATTA TTATATAATT 360  
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAAATCTAA TTCTTTTAAA GTTAAAACAG 420  
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480  
 TTACATTCAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540  
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600  
 45 CAACGCTTTT ATTTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAAACTTGAA 660  
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTGCC 720  
 50 ATAACGTACT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTAGTT AACTCATTA 780  
 CGTTAGTTTC GTTTTGATTT ATATAAtAAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840  
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTGTTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020  
TTAGATTTTT CGAGTATGAC TCAATTTCTG CATTACGAGG ATTTTAAACA TAACGGTT 1078

5 (2) INFORMATION FOR SEQ ID NO: 662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1398 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

15 AACTTGCTTT TTAGTATCTA CGTTAATATT AATAGCTTTA ATTTCACTTG TATTAATTAA 60  
ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA 120  
20 AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA 180  
TTTTAAAACT GATTTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT 240  
AAATGTTAAG CTTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTGaTTG CATATGGAAC 300  
25 ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC 360  
GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA 420  
AGTTGTTGTA ATCAATGACT TAAATTTTCAT AAATTATCTC TCCTTTTTTG TGTAATTCGT 480  
30 ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAAGTGA ATATTAATAA 540  
TAAATTATCT TTAACAATAA TTTTAAACA CTGTTAAAAG TTCTTTTAAT TTTGATTAAAC 600  
TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAACCTA 660  
35 AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTCGATTAT ATTTACAGCA 720  
TCTTTATACT CAAAAACAT TACTTAAAA ATATAAATTC GATTTAATAA TTAATTTAAA 780  
TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT 840  
40 GGTGAAAAAA ACAAAATCCA ATTCACTAAA AAAAGTTGCA ACACTTGCAAT TAGCAAATTT 900  
ATTATTAGTT GGTGCACTTA CTGaCAATAG TGCCAAAGCC GAATCTAAGA AAGATGATAC 960  
45 TGATTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAAACTG 1020  
GGGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT 1080  
CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA 1140  
50 AAAAGAATAT CCTTATCAAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC 1200  
TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA 1260

CAACAAAGGC TTTGTTTATA CAAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380  
TACACATACA CAATCTGA 1398

(2) INFORMATION FOR SEQ ID NO: 663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1200 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60  
ACCAACTTGT AGTCGTTTAT TATCTAAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120  
TTGAATGATT GAATATAAGT CTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTGT 180  
GTATGTTTTA GAACGTGTAG AAATGATTTT ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240  
TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAATA TTACGCTCCG TATACGGAAT 300  
GTCCATGTTT tTGkTAACCA TGCTTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360  
aAATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420  
TTTAGTTATA GATCAAGAAA AAACATTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480  
ATAACTATCT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540  
CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600  
TCTTACATTT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660  
GGCATTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720  
AATTATATTG GCGCACTAAA ACAATTTGTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780  
TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840  
ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900  
TTCATACAAT CTGAAGTCcC TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960  
TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020  
GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCTTTAC 1080  
AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140  
CTTGTAAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

(2) INFORMATION FOR SEQ ID NO: 664:

(A) LENGTH: 787 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

10 TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT 60  
 AAATTGTAAG CTTTGAGTAA TATTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA 120  
 CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT 180  
 15 TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAsG wACAAATTGT 240  
 GATATTTTTA CATAGTTGTT TAATCATTAG TAATCCGCCC TTTCAATATT ATCCTTCTTT 300  
 ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTCCAATC 360  
 20 AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtCtCTAAAA TTGGAGGTGC 420  
 ATAATGTATy CCAGGTCTGT TTTTCAAAT ATCTTGATTT CGTGTGTATG TTAATTCAAA 480  
 TTGCGTTTTT TCATTTGACT TTTCAATTAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC 540  
 25 ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTTTCTAC 600  
 AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC 660  
 30 ACCATACTTC AAGTCATTCG CAATAACTGA CCAGGTGACA TGgCCAGTTn ATTTATTTTT 720  
 ACCGCTGGCA ATTGTGTCAT AATTGCTGC ATCATCAACT AATCGTTTTG GAAGTAGCTA 780  
 TTTGCTG 787

## (2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

45 TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGGChTn AATCAATATA TATATTTAAA 60  
 AGCAAAGGCG CGCCATGTGC CTTTtTThTA tTTTGATAT CTGTATCAAA ATCGATTGTA 120  
 50 TTAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG 180  
 GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTCGTAT TCAAAGTTTT 240  
 55 CATTTAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT 300

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420  
 CGAACGCTAA CATATCTTTA TCATTATTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480  
 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTTAGTCATG TTT 533

(2) INFORMATION FOR SEQ ID NO: 666:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60  
 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120  
 GCTTCGAATC GGTCACGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180  
 TAATGGATTG AAAGCATATA TTGCGGTCAT CTTGTAAATG CACCAAACAT CCCAGCATTT 240  
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300  
 CGACTCTGAA AACCTGGACA TGTTGATGAA CCTTTnAGAC AAGGGAAGAA ATTTGCAATC 360  
 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

(2) INFORMATION FOR SEQ ID NO: 667:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60  
 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAAA ACAACTGATT 120  
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAGAG 180  
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240  
 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300  
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCaAytGAta GCyTTATATA 360  
 ATAACAGTCa gGTtACCAAC AAmATwTATA TCCcCGAAGG AAGCGGGTAT TT 412

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

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10  TTAAGTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA      60
    CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTTGGTG TGAAATTAAA AGAGATTATA      120
15  GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTTCAGAGGG      180
    AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC      240
    TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG      300
20  TATACGTTTCG GTCnTATTnC CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG      360
    TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA      400
  
```

(2) INFORMATION FOR SEQ ID NO: 669:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1236 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

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35  TGTTTCGATAT TTTTAAATTT ATCTTTTAAA TACAACAACT GTTTCGGTAA TGATTTAACT      60
    GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTAT TTAACCTATC GATAATCGCA      120
    TGTAATCCT TCAAAATGTC TTTTGTTTCA AAAGTAAATA CATTATGGAA GCGATGAATA      180
40  TCATCATCAT AAACATCAGA ATCATTGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA      240
    TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA      300
    TCTAATTTTT CCAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTTCa      360
45  TTTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT      420
    GTCACCTGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA      480
50  AACCAATTGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA      540
    CCAATTTGaa TGTTCTGTGC ATTTGCTTAA ATAAAATTAT aATAATGAAC ATCGTGACGT      600
    GCCGGTACAT ATGTTTCAAT TTTCTGGTca AAATACATCT TTTGACCACC TTTTAAATTT      660
  
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ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAATTT GACTAATAAG CCCCAATGAA 780  
 ATGTAATCaC TTtTACTTTT AATCAATAGT GCATTAATTT TAAAATTCAA CGCTTCATTC 840  
 5 ATTGCTGGAA TATCTTTTTT TAACAATTGA CTTTGCAGTA ATTTAGTATT GGTAGAAATC 900  
 ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT 960  
 10 TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTCAC TATGCATGAG CTGATCTAAT 1020  
 ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT 1080  
 TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTTGTTG TCGGCTTTTT AAAATCAACT 1140  
 15 TGCTTACGAT AGATAATCTG TTCGAACCTT TCGTACGATT TATCCAATGG CTTTGCATCA 1200  
 TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA 1236

## (2) INFORMATION FOR SEQ ID NO: 670:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1819 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30 ACaSaATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA 60  
 CATTTAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG 120  
 AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG 180  
 35 CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG 240  
 TTCATTTATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCAyT 300  
 TTAmATTAAA TAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA 360  
 40 ATCAACCKGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT 420  
 TTGAACACGG TGGCATTGTG TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAACATAAA 480  
 45 GATGTATTTG AACTATTTGA TGTTGAAATG CcTATCGTGA TGCCAAGGCT TAGAATTACT 540  
 TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG 600  
 TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA 660  
 50 TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA 720  
 GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTA ATAAAAATAA TGAAATTCAT 780  
 55 ATACAACAGT ATGATTATTT GTTAAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC 840

5 GAAAGAATAT GGAATCCACT TCAAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC 960  
 TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC 1020  
 AAGGGTTTAG CCCGATTTAT CTTAATGATA AATCGGGCAT TTTTTTGTTT TTTAAAATAA 1080  
 ATTTACAAA TTTTGATAA ATAGTGGTGG ATAGTGGGA GATGTGGTAA ATTATATATA 1140  
 10 AGGTGAGGTG ATAAAAATG TTCATGGGAG aATACGATCA TCAATTAGAT ACAAAGGAC 1200  
 GTATGATTAT ACCGTCCAAG TTTCGTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG 1260  
 GCCTTGATAA ATGTTTATTC GGTTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA 1320  
 15 TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAGTT TATGCGTATG TTCTTCTCTG 1380  
 GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGGTATTAA CATCCCTCAA AACTTGAGGA 1440  
 AATACGCTAA TTTAACTAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATTT 1500  
 20 GGGATAGAGA AACTTGGAAT GATTTCTATG AAGAATCTGA AGAAAGTTTC GAAGATATTG 1560  
 CTGAAGATTT AATAGATTTT GATTTTAAAT ATGGAGGAAT TGAAGtGTTT CATCATATCA 1620  
 GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAAA AGAAAATGGT GTGTACATTG 1680  
 25 ACTGTACGCT AGGTGGAGCG GGACAnGCCC TTTATTTACT AAATCAATTA AATGACGACG 1740  
 GAAGATTAAT AGCAATCGAT CAAGACCAAA CTGCAATTGA TAATGCTAAA nGGGTATTAA 1800  
 30 AGGATCATTT GCATAAAnG 1819

(2) INFORMATION FOR SEQ ID NO: 671:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 609 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

45 ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAATCT ATGCATCGAT 60  
 AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT 120  
 GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT 180  
 AGATTTAACA TTTATCGCCG CTGTATTAAAC AATTGTCGGT TATTCAATTA ATGATACAAT 240  
 50 CGTAACGTTT GACCGTGTAC GTGAAACTT ACAAAGGTT AAAGTGATTA CGACAACAGA 300  
 ACAAATTGAT GATATCGTTA ATAGATCAAT tAGACAGACA ATGACACGTT CAATTAATAC 360  
 55 AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT 420



TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540  
 ATTAGTTGTA TATAAaGAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600  
 5 AAGCGGTAT 609

## (2) INFORMATION FOR SEQ ID NO: 672:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAACAG CAATTTGAAC GTTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60  
 20 TAATCACGAT CCTTTATCAT CAAAGATTTT ATCAAATCTG CCAGATAATG TtntTGTATT 120  
 TTCAAATAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180  
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240  
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTGCATGGT ACGTATAGTA AATCTTCAGT 300  
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360  
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAACATATC 420  
 30 AGGTAATATT CAAGGTAGAC ATTTTAATGA GCAaGGTGAA aaAGGTTGCT TATTAATCGm 480  
 GGGTGACCAC TTAaaATTAA AGACTAAATT TTATCCTACA CAGTATATTA GATTTGAAGA 540  
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACTT 600  
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTTATCGT TTAACGCTTG TTATTAATAG 660  
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720  
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780  
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAAA CTGTTTTTGA 840  
 TAAAGCGATG TCAGATTTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900  
 45 AACATTCGAC CATAAGCAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960  
 AGGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020  
 50 GTAAAATTGa ATTTAATAAA AACyTCaCTG AAA1TTTTGG TGAAAATGAA GCGGGTAAAT 1080  
 CGACGATTCA AGCATtCATC CATTGATAT TATTTGGATT TCCAACATAA AAGTCTAAAG 1140  
 AGCCAAGACT AGAACCACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200  
 55

TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT AAAAAAGAAA CTTAATTATA 1320  
 TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTG 1380  
 5 ATAGAAATCT AAATGAAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT 1440  
 CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AAaAGATGAA TTATATAAAA 1500  
 aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTAAAACAA CTAGAAAGTC 1560  
 10 AAATTCGTGA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA 1620  
 AATCATCACG TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG 1680  
 15 AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATTACACA AGAATGGAAG TCTCTAGAAC 1740  
 AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG 1800  
 CACGAGCGCA TAAGCAATCG TTAGWAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC 1860  
 20 AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA 1920  
 TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAACTT ACTGCAATCG 1980  
 AAAAGGATAT TGCGAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT 2040  
 25 CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA 2100  
 TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA 2160  
 ATAAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTG TGTGAAGAA AAATAGTTCC 2220  
 30 TG 2222

## (2) INFORMATION FOR SEQ ID NO: 673:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

45 TTGCAGGTAT CATTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA 60  
 AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT 120  
 GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG 180  
 50 TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAAGCGG CGGTTATGCT TATTTAGCTT 240  
 TAGCGGTACT TTCAACGTTG TTAATTGTTG CGAAAAAGC TACAAATAAA AATAAGAAA 300  
 TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA 360

## (2) INFORMATION FOR SEQ ID NO: 674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT 60  
 TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT 120  
 CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTTCAA 180  
 TAACCTACAC GCTGTCACAT GTGCGCTATT TGC GTTATAT CCTGyTTTTA TGGCACTTTG 240  
 TGTTACATTC AGTGTCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC 300  
 ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT 360  
 TGTCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG 420  
 TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATTTT TATGTGATTC 480  
 TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT 540  
 ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT 600  
 TTAGCACACT TGCATATACC GGCTGTCGTG CTGGCKAGAT ACTAGCATTG AAGTGGTCTG 660  
 ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAAC ATATTACAAT CCAAATAATA 720  
 ACAAGAAGAA ATATCAGATA CTTCCCCCTA AACTGAAAG TTCTATCGGT AAGATTTCCG 780  
 TTGACCCAAA TGTAATAAAG GtGtTGCgtG ATTATAAGAT AAACGTTCAA AATAATTGGA 840  
 AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC 900  
 ATTATGTCAC GTACCAGCAT ACTCAA 927

## (2) INFORMATION FOR SEQ ID NO: 675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

GATGTTAAaA TAAGTACATC ATTTTGACTC CCAAATATTG GCTTTAGACC TTGAAATGCT 60

CTCATAATGG CATCAGGTAC cAGGGGTTGG GaCCAGGTGT TAATAACAAC GGTTGATGAT 180  
 AATACATTTA TATGCCTCCT ATAAATAAGA TTTCATTATT TTAGCAAATT TTCTGAAAAT 240  
 5 TTAAAAGCCT AAAAgtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT 300  
 TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTGAA 360  
 ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTGGTA ATCGCTTTTC TAATTGTGCT 420  
 10 ATTTGATCAC TTGGAATTTG AATTTGAGGA TGGTGCACAA TTTTGGACAT ACTGAATTTT 480  
 CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTTGTkCAA TTGAAATATC TGTGAACTTT 540  
 GCACGTTCAA GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC 600  
 15 ATTTTCATCGG GATTTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC 660  
 TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAGTT 720  
 TGGACTTTAA AGTCATGTTG ATGCAATTGC TTAAACCTCC AATATAATTG TGATAGTTTA 780  
 20 ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA 840  
 CTGAAAGATG AATTACAAAT TGTTTCGCAC CGTGGATTGC CGAGTGATT TCTGAAAAT 900  
 25 ACAATGGTCG GTTATCGAGA GGTAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT 960  
 CATTTGACCA AAGACCAACA TTTTGTGTG ATACATGaTG AAACAATTGa TAGAACATCG 1020  
 GaTGGtArGG GGCGTAwTGc TGaTTACACA TTATCGCAAT TAAAATCATT TGATTTTGGT 1080  
 30 AGTTATAAAG ATGTTGCTTT 1100

(2) INFORMATION FOR SEQ ID NO: 676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

ATTAATTTCA TATGGAAATA GTTGAATAA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG 60  
 45 AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC 120  
 TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTGG AAGATTCAGG 180  
 TTCACCAATT ATACCTAATG CTCTCCTTG ATAAATATGT AAACCTAATAT TGTTTAAATC 240  
 50 GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTC TTATTCTGTT TATTCCTATA 300  
 GTAGTGTGTT ACTTTTAGTA ACTTTAAAAC AATTGAACTT CCCATCTATT TTCATCCTTC 360

CCCCACGCaA AAATACCTTT TAATCTTnCT ACTTTAAAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

15	GTCAAGTTTT CGGCTAGATT TTAAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA	60
	CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTTGAATTAA	120
	ACATTGGGCG GCCATTTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT	180
20	TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA	240
	ATTAATGACT ACATATTATG CAACGGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT	300
	AGTATAACTA TCGCATTTTT CAAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG	360
25	ACGCTATTTT TTTGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC	420
	TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAAGAAA ATGGTTATGC	480
30	GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCACTCAA GCAATTTTATG AAGCGTCACA	540
	AGAAGAAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG	600
	TTTCTACACA ATTGTTAAAA TGGTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC	660
35	TGTAGCAATC CATTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC	720
	TGGTTTCACA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC	780
	AACTAAAAAA GTTGTGTAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG	840
40	TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTTATG CTGATCCTAA	900
	AGAATGTCAA GAACTAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAc ATTAGGTTCA	960
	GTTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT	1020
45	TTATCTACAG GTTTACCATT AGTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC	1080
	CAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA AACTGAAAA CCAAATCGCT	1140
50	TCaGCAAAAG CAGTTCGTGA CGTTTtAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA	1200
	TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAAT TAAAGAGTTC	1260
55	GGTACTTCTA ACCGCGCTAA ATAATTAATA TTTAGTCTTT AAGTTATTAA TAACGTAGGG	1320

AATAAATAAA ACAGTTTGAT TTTAAATGA AAGCGTAAAA ATGGTAAAAT ATATCAAAAT 1440  
 TGATTGTGAT A 1451

(2) INFORMATION FOR SEQ ID NO: 678:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 668 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTTAAACA AACACCTAAT GCAACTGACG AAGAAAAGCA GGCTGCTGTT 60  
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAAACAAAT 120  
 GATCAGGTAG ACACAACTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180  
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTTAAAGA AAAGCAACAG 240  
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATT 300  
 GCTAAAGAAA AAGAAAAAGC ACTTGCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360  
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420  
 AAACCAGCTG CACGTGAAAA AATCAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480  
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540  
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600  
 ACAGTCAGCG CTgATAGCtT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660  
 AGATGCGT 668

(2) INFORMATION FOR SEQ ID NO: 679:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1906 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAGGAAA AATAGCCTTt AACGAATTtA CGAAACAAAt TGAATGTTTA 60  
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120  
 AGTTTAAGAA GTTATATCGA AAAGATTTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

	ATCGTGGGAT GGACATAAAC GCCTTGAAAA GTTATTTATC AAATACTTAG GTGTTGAAGA	300
	CcTGaAGTGA ATAGAACAAC TACCAAAAAA GCATTGACTG CTGGAATCGC TAGAGTAATG	360
5	GAGCCTGGAT GTAAATTTGA CTATATGCTT ACACTTTATG GTCCTCAAGG TGTAAGGTAAA	420
	TCTGCTTTGC TAAAAAAATT AGGTGGTGCA TGGTTTTCTG ACAGTTTAGT TTCTGTTACA	480
	GGTAAAGAAG CTTATGAGGC CTTACAAGGC GTTTGGCTAA TGGAAATGGC AGAACTTGCA	540
10	GCTACAAGAA AAGCTGAAGT TGAAGCTATT AAGCATTTCa TATCTAAACA AGTTGACCGA	600
	TTTCGTGTTG CTTATGGGCA TTATATTGAA GATTTTCCAA GGCAATGTAT TTTCATTGGT	660
	ACAACTAATA AAGTTGATTT CTTAAGAGAT GAAACTGGTG GAAGACGTTT TTGGCCAATG	720
15	ACTGTAAATC CAGAGAGAGT TGAAGTGAAC TGGTCTAAAC TAACCAAAGA TGAGATTGAC	780
	CAAATTTGGG CAGAAGCTAA ACACTATTAT GAACAAGGAG AAGATTTATT CCTTAACCCCT	840
20	GAACTAGAAG AAGAAATGCG TTCAATACAA AGCAAACATA CTGAGGAATC TCCATATACA	900
	GGCATTATTG ATGAATATCT TAACACACCa ATTCCtAGCa ATTGGGGATGA CTTAACTATC	960
	TTTGAACGAA GACGATTTTA TCaAGGTGAT GTTGATATGT TACCaaCAGG AAATGTaGAT	1020
25	TACGTTAAAA GAAATAAAGT CTGTGCGCTT GAAGTGTtTG TTGAATGTTT TGGTAAAGAT	1080
	AAGGGAGATA GTAGAGGATC TATGGAAATt AGAAAGATTT CAAACATCTT AAGACAATTA	1140
	GACAATTGGT CTGTATATGA TGGTAATAAA AGTGGGAAAA TTCGATTTGG AAAAGATTAT	1200
30	GGTGTAACAG TAGCTTATGT AAGAGATGAA AGTTTAGAGG ATTTAATATA AGAAATATTG	1260
	AATAAATATG CATTTTAGAG TGTTGTATCA GATGTTGCAT CATTTTTTGA GTGATGCAAC	1320
	ACGGGAGTGT AAAAAGTAAT CGTAGGTGTT GTATCATTTT TGGTGATGCA ACATTGATGC	1380
35	AACAAATGAT ACAACACCTC TTTCTTTTCT AGCTGTAGGG TTCAACCCTG TTTGTTTCCA	1440
	ATGTTGCATC AAATTCACta TAAAGTTTAA AAAGTAGTGT TAGGGAGTAA AGGGGTATAG	1500
40	GGGTAACCCT CTAACAGCTA TTTTAAAAG TTTGGCAAGA ATTGATACAA CATCGGAACA	1560
	CAAATATAAA TTTTGTATAC AAGGTGAATA AATGAAAGAA TCGACATTAG AAAAATATTT	1620
	AGTGAAAGAG ATAACAAAGC TAAACGTTTT ATGTTTAAAA TGGGTCGCAC CTGGAACAAG	1680
45	AGGTGTGCCA GATAGAATTA TTATTATGCC AGAAGGAAAA ACATATTTTG TAGAAATGAA	1740
	GCAAGAAAAA GGAAAGTTGC ATCCTTTACA AaAATATGTG CATAGACAAT TTGAAAATAG	1800
	AGaTCATAAA GTATATGTGT TATGGAATAA AGAACAAGTA AATACtTTTA TCAGAwTGGT	1860
50	AGTGAACATT TGGCGATTGA CTTTCAAACC ACATAGCTnt CCAAAG	1906

(2) INFORMATION FOR SEQ ID NO: 680:

(A) LENGTH: 948 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

10 AATTATTTGA ATAAATTAGC AATTAAAGAG TTGATTTGTC AGTTTAAGyA TTTGAGTGCA 60  
 TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAATATA AGCCGAGAGA AATTGCTCAA 120  
 TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTtA AAATAAAATA 180  
 15 AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT 240  
 TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT 300  
 GAATAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA 360  
 20 AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT 420  
 CCAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTC GAAATAATAC 480  
 TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT 540  
 25 TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA 600  
 ATATACTGTA ATTGTAGTTT CTA CTGTTAT ATTCTTCTTA GTCTTTTTCT ATGCCTTAGA 660  
 30 TTTAGGAATT ACAGCATTGA AAAATTTATT ATTTGGTTAG AGGAGTGAAG ACATGTCTGA 720  
 AGAAGTTGGC GCAAAGCtTG GTATGCAGTG CATACATATT CTGGATATGA AAATAAAGTT 780  
 AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA 840  
 35 GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAaAGnT GGCCAAGCCT AAAACCGCCT 900  
 GTTAAAAAAA ACCATTCCCC TGGGnTAnGG TTTTAAGTGG GAATTTAA 948

## (2) INFORMATION FOR SEQ ID NO: 681:

40

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 863 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

50 ACA<sub>n</sub>ATAATA ACAAAGCGCT TGCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk 60  
 TCTATACTAT ATATTATTTT TCTAAAATTT TAACACCCTC TTGAGTGCCT ACAATAACTT 120  
 GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT 180

55



TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300  
 ATTCAATTTT ACGTAATATG TGATACCACT TAAATTTATC CACCTCTACT GGTAACCTAA 360  
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTCATCGAC AACCACAACA AAACGCGATG 420  
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480  
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540  
 10 TTTTACATAT TTTAATACCT AATTCTTTTG CTAAAAATGC AATTTTATTA GAAGTGCATA 600  
 CACCTGTAAT ATTGTAACCA CGTTCTTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660  
 CCATTGTACT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTTAAAACAT 720  
 15 CATTTAATGT CATTAACTTG AGTGCTTTGA CATCTTTCAT GAAGGTAGCC TCCCATATTT 780  
 AtGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTATnGCT 840  
 20 AACCATTGTGT GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 480 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCATTTTGG TTGTTTCAGCA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60  
 35 TAATTCTGTA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCTTTTT CTTCATTAT 120  
 TATTTTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAGTTTG 180  
 GATATTACTT TGTAATAATCA ACCTTGGATG TTGACTTAAC TTATCTTGCC CATCTTTTAA 240  
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300  
 AGGTTGAATA ACACTTAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360  
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATAACCTTCTC CAGCAATAcc 420  
 45 GaTTTCGCATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 689 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60  
 5 AACTGGAAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAAATCACC ATTTTAGCTG 120  
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTAG 180  
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240  
 10 GTGACAAAGA AATTGAGCAA GTAAAAGAAa AAGAAGGCCA ACGAATACTA GCCAAAATCa 300  
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360  
 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420  
 15 CGGATCAAAC GGCCTGCACA AGGACgTCTT ACAACGCaTA AcTACGCACT ATCATTcAGC 480  
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTAA TTGAACAAGT GTACAGAGCA 540  
 20 TTAAAGATTA TGCGAGGAGA GCGGTATCAT AAGTAAACT AAAAAATTCT GTATGAGGAG 600  
 ATAATAATTT GgAGGGTGTT AAATGGkGGA CaTTAAATCC mCGTTCATTC mATATATAAG 660  
 ATATATCACG GTAATTGCGC ATATAACTT 689

## (2) INFORMATION FOR SEQ ID NO: 684:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 858 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60  
 AGATTTTTTG GAATAACCTG AAAATTCAAG TtATAGCGTT GCTTATATTT TAAAGGTGG 120  
 40 TGATAATGAG ACTTTTTGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180  
 ATTAAATAAA TGTACTCTTT TAATGCGTTG ATAActGTAT TTGTAATTTA GAGAAGGGGT 240  
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300  
 45 TAGCATCGAG ACGCCCAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360  
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420  
 CTAGCTTTTT TCAATCCTTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480  
 50 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540  
 TAATGTGCAA GTTGGTCGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTA 600

GCCACCTTGT TTATTTAAAT CGATAACACG GTTTGCGATT GTATTGATAA ATTCAAAGTC 720  
 ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTAA CAGCAGTAAT 780  
 5 ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT 840  
 TTACTAGCAN CACGACTT 858

## (2) INFORMATION FOR SEQ ID NO: 685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

20 TTAGTATTTT CAGGnTGGAA ATTGATGTTT GAAATTCAC T GAAATGGGCC AGAACCTgAA 60  
 ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC 120  
 TTACTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGGAA TGACA TTTGATTTAG 180  
 25 GATTGCGATT CGGTAAATCT TTAAC TTGGA AAGTCCCAGT AATGTAATCA CCTTGTTTAT 240  
 GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTTGTTTTTT ACCATTGACA TATAATGTAT 300  
 CATTTTGTGA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAAACA TAGTCATCAT 360  
 TTTGTTTGC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA 420  
 CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA 480  
 35 TTGTATATGG CGTAACAATA AATTACCTA CTATAAATAA AATGACAAAA GCGACTGCAA 540  
 TTGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA 600  
 ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAACt AACATTACCA ATAATAtCCT 660  
 40 TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtk ATTATCTTGA TCATTTAGCA 720  
 CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAA ACTAA 780  
 AATCTTTAAT TTTTCTGTTC TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA 840  
 45 ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTCTGA CTAGTATATA 900  
 TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAAC TT 960  
 50 TAATTTTATT TACAATAACA CGATCCCCTT TGTTAAGGGT TGGTGACATA TCATTATTGCG 1020  
 GAATGACATG ACCAACTATT ACAAAGTTT GTACGAACAG TACAATGATA ATAGCAAGTA 1080  
 TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCCATA 1140  
 55

ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTCCT TACCTAAATA ACCTAAAATA 1260  
ATTGTTGAAA CTAACCTTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA 1320  
5 GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA 1380  
AACAATGGGA TTAATCCTTG GCGATCAATA AAATAATCA AGCGTTGAAC AGCAGTACGT 1440  
TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA 1500  
10 AATGTTCCAG AAATTAATCC AAGCCAACTA ATCAATATAC CTAAAATAGG TCCATAAGCT 1560  
TGAATGTAA TTAATAATATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT 1620  
AACAATATAA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT 1680  
15 TGATGAAACG ACAAATCATC AATCCCTTTC TTTGGTTGAA GATAATTATT CTTACATTAT 1740  
AAAGTTA 1747

(2) INFORMATION FOR SEQ ID NO: 686:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 645 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:

30 CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAGAA ATTAGGTATG TTAATTCTTG 60  
TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG 120  
35 GCAAGGTAAC AATTWAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGA 180  
AAACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA 240  
ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT 300  
40 TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT 360  
TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTATC AACACGAGCA TGGTGAAGAG 420  
CATGAACATG AGGGACATGA TCATGAGAAA GAAGAACATC ATCATCATCA TGGTGGATAT 480  
45 GATCCACACG TATGGTTAGA TCCTAAAATT AACCAAACTT TCGCTAAAGA AATTAAAGAT 540  
GAATTAGTGA AAAAAGATCC AaAACATAAA GATGACTATG AGAaAAACTA CnaAAATTAA 600  
ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA 645

(2) INFORMATION FOR SEQ ID NO: 687:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 956 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

TTTGTTACTG CTTCTAAAAT AATATCCTTT AATTGTTTAA CATGTTGGAT TGTCATATGA	60
GGTGATGGTA CATTAAAAGG ATTAAATTCA TCTATTTGTG CATATTGATT TATGACATCT	120
TGATGCATTG AAATAGGGTT GATATCATTT GTTACTACTT TATTAGATTG GTCTTGTGAC	180
ATACTAATGG TGCCACCACT ATGAATAACA AGTAGATGTT TCATATATTT CCTCCTATAT	240
TTAATTTACC TAATTATGAT AAAATATTAT TCATAAAACG ACAAGGAAGG GAAATGACGC	300
ATGAAAGCCA TTAATATTGC ATTAGATGGT CCAGCTGCTG CCGGAAAAAG TACAATTGCG	360
AAACGTGTAG CCAGCGAACT ATCAATGATT TATGTCGATA CAGGAGCAAT GTATCGTGCA	420
TTAACATACA AATATTTAAA ATTAAACAAA ACTGAGGACT TTGCAAACT AGTTGACCAA	480
ACAACATTAG ATTAACTTA TAAAGCAGAT AAAGGTCAAT GTGTCATTTT AGATAACGAA	540
GATGTAACAG ACTTTTAAAG AAATAATGAT GTGACGCAAC ATGTTTCATA CGTTGCATCT	600
AAAGAGCCAG TACGTTTATT CGCCGTTAAA AAACAAAAAG AGTTAGCTGC AGAAAAAGGT	660
ATCGTAATGG ATGGTCGCGA TATCGGAACT GTAGTGCTAC CAGATGCAGA TTTAAAAGTA	720
TATATGATTG CATCAGTTGA AGAGCGAGCA GAAAGAAGAT ATAAAGATAA TCAATTAAGA	780
GGTATCGAAT CAAATTTTGA AGATTTAAAA CGTGATATTG AAGCTCGTGA TCAATATGAC	840
ATGAACCGTG AAATATCACC ATTAAGAAAA GCAGATGATG CAGTGACATT AGATACGACm	900
GGCmAGTCGA TTGAAGAAGT TACTGACGAn ATTTTAGCGA TGGTGAGTnC AATTnA	956

(2) INFORMATION FOR SEQ ID NO: 688:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1166 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

AAAAGGGAGG AAAGAGAACA GTTAAATATG AATACAAAAT AATTTTGT TT TCGGACAGCA	60
GGGGTATTAG ACGCGATTGA CAATGTCGT TTAATTAAAC GTAATGTTA TTTAAGCGAT	120
GAATATTAGG TGAAAAGTTT TTGAATTTGA ATGTAATTGA GGTTTATTGA TTAGACATTT	180
TATTGAATTG CGTGTTATTA TATAAATGTA AAAATAAGAC GACATGCGCG AACATGTCGT	240

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TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTAAATATAT 360  
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420  
 5 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTTGATGAA GCGTTTAGTT AGAGTATTTT 480  
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAG CTATCTGAAG 540  
 AATAAATAGA TACTTTTTGG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TKCTCGGTGA 600  
 10 GAGAATTCCA TGTATTTTGA GCATCTAGCT TTTTGTTAAA GTCAYCGTAG ACATTTTCCT 660  
 TAGTTAAATC AATTTGTTTT AATCCTTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720  
 CATCATTTCC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780  
 15 TGATTGTTTC GTACTCGTTA CTAAAATAA TATCAGAATC ATGTAAGaAT CTTTAACTTT 840  
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900  
 20 TGTATCTAAT CCTAAGTATG AAGAATGTAA GCCTGTTCTT AATGTTGTGA ATACTAAAGC 960  
 ACTTGCTACT aATGTTTTAC CTAAAAAtT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020  
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAACTAAAT 1080  
 25 ATCAAAAATG TATTAACAT CTATTAATA AAAAATAGAA TAATTTTTTA ACATAGTTTT 1140  
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

## (2) INFORMATION FOR SEQ ID NO: 689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1083 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60  
 GTTCTTATA TGTTGTCTAT TAAATTTTT AACAAACAAG AACTAKAATT GTCGATTTTG 120  
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180  
 45 GTTCTTTTtG GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240  
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CCTTTTAGAT AGCGGGGATT 300  
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCCTCG 360  
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420  
 GAAGTTCGAC ACTTTTGgAT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600  
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660  
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA AACTGATAT ACATCATATT 720  
 AATTTCAAAC AAGTCATTa GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780  
 10 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840  
 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAAT 900  
 CATAAATTGG AATATATAAA TGTAATAAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960  
 15 ACCAACCAGT ACCTCGCCAr AGWTaTAATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020  
 TCATATTAAC AGGTnTAATA CAAGTATTTTc TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080  
 ACG 1083

(2) INFORMATION FOR SEQ ID NO: 690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

30 TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATtTGA 60  
 GTAGCGATTG GTTTGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120  
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180  
 ATAATCAGCC TCTTAATGAC GCTGATayTA GAAAATTACA GGATATTATT AAAATCATTG 240  
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300  
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360  
 AAAGTGTCGC TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420  
 45 TTATGGGCAT GGGTTTTAAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480  
 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540  
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600  
 50 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

	TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAAATA TTCTTCCCAT TTGATTCTTT	60
10	CCAAGATGTT CACCTTCCAT ACTTAAAATT TAGTAACATT TTCTAATAAT ATAAGATTAA	120
	TCACAAAAAA TAAATTTTGC AATTAAAATA ATCCATTATG TCGTGAAATA AGATTTCAGT	180
	TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT	240
15	GCACCTTGTT GGTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA	300
	ACAGACATCA ATTCTGATAC AGATGCCGTA TTTAAATTTA CTTTAGTATT ATTTGTGTTT	360
	CCaTTTTTTT CGTGCACACT GTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA	420
20	TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTCAG ACAAATTAAT TTGACTTACA	480
	TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTACTCTATC CTTAGATGTC	540
	ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCCTTA	600
25	TTTTTGGAAT TATCTCCATC TTTGACCTGG ACATCTTCTA C	641

(2) INFORMATION FOR SEQ ID NO: 692:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 631 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

	TATTAAAGnA CTTGATGAAC CAAATCATAA AAAGCnATAT ATGTTATTTG CAGCTGGCAT	60
40	TGTGTTnGCA ACTATTTTAC TTATTTTCGGC ACATTTATAC AGCAGAAAGA GAGGTAACCA	120
	AGTTTGAGAA TCATAAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC	180
	TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA	240
45	ACTGTTGCAT TGACAATGAC ATTGACAAAA TTGGATTTAC CAATTGTCGG CAAACCCACG	300
	TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG	360
	CCGAATGTTG AAGCTGTTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT	420
50	AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT	480
	GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGaTCAATT TAATCGTAAA	540

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GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

(2) INFORMATION FOR SEQ ID NO: 693:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

15	AATTTAACTA TGTTTTCCAC ATTGTTTCAT GTCACGAAAA GGACAACGCG CGACTATAAG	60
	TATCAACTAT TTCCACAAGT TTTATTGGTG TTTTATTAT TCATCGATAC GCTTCATTTT	120
	CATCTCTCCA ACACAAAAAA GAAGCTAAGC AACTTATGTT GCCTAACTCC TCTATACTAT	180
20	CCATATTTTA CTATTATCCA TATTTCAATG AATTATCTAA TGTGCGCTTC TATTTTTTCA	240
	ATATTTCTAC CGTCAATGAC GTCACCTCATG CGATTTGTTT GTAATTTTTT ATTAAGTTCA	300
	AACGTATAAT AGCCGCCATC TTTCAATATC ACTTTTATCT TACTATCTTT AGGAAACTTT	360
25	TTATACAGAT CAAAATTTTG AATTAAATAC TGTCTCAATT TAAAGTCGAG TTCTTTAAGT	420
	GAAATCTCTT CTTTATAAAT GTAGTGTAAT CTACCGTACG TAGCAATACC GTCACCTTCA	480
	TCTCTCTTGA TTTGAAATCT TGGTGCGTTT ATATAATCAT AATAAGCGTC TTGATTTTTT	540
30	TTAGTGACAC CACCATATGA AAACACTGTG CCATTACGGT TTTCCGCTTC TTAAACAACA	600
	AATATGTCTA ATCCCGGATT TTTACGTGCT TTAAATCTTT CAATATCTTT ACCAAATATC	660
35	TGTACTCTTG TGAATTTTCT ATTTTATCA AAGATAAGGT AATGCTTGCC ACCTTTGCTA	720
	TAACGATAAC CAGTAACATT TTAAAGTTCC TTAAGTGGC CACTATAGTA ATCTCTTAAG	780
	TCAAAGATAT CTTTGTGCAC ATTTTCATAT TTTGCTTTAT GTTCACTCGC ATTTACAGTT	840
40	TGATGCAATG ACGTTATTGT TCCTGTTGCT AAAATACCTA ATGCTAAACT TGCTTTGCGA	900
	ATTGCTGTCA TTTTCATAGT TGTATGCTCC ATTCGTAATT ATTAGATTTG TTCGCTTACG	960
	TCTATTGAAT CATACAGCTT TATTATAGTT AGCGTATTTG ACCTTTCACA TTAAACCATG	1020
45	TTTAATAATC ATTGAATCAT TATTAAGTAA ATTAAGGATC TATAATGTTC GTTAAATAAA	1080
	CTGAnCCCCGT TGTGCTTCAC ACCCGnTnGA T	1111

(2) INFORMATION FOR SEQ ID NO: 694:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

5 TTATGGATGG ATTAAGAGGT CGTGTTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT 60  
 TAACAATTAT GGAAAATTTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA 120  
 AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT 180  
 10 AACTTGTTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA 240  
 ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT 300  
 ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT 360  
 15 TACGGCAATT ATTTTAATTA TGCTCAACT TTTATkCTCA CTTATAACTT CTAATTTAAG 420  
 TTATAG 426

## 20 (2) INFORMATION FOR SEQ ID NO: 695:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 737 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

30 AAAAGGGGnG TAAGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA 60  
 AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG 120  
 CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA 180  
 35 AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA 240  
 ATTGGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA 300  
 TCGTTTAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA 360  
 AATTTCTATT GATAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA 420  
 ACTTGAATTA AAACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTATA TTGAAAaGCC 480  
 45 GAATTACGGA GAAGAAGATT AATATTACAC TATAAATAAG TCATTACTTT ACGTACGCGT 540  
 TGATGTATGT AAGTAATGAC TATTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC 600  
 TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG 660  
 50 GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG 720  
 TATTACGTAT TGCATTA 737

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

10	AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC	60
	GATGATGGCA GGATTTATTA TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC	120
15	ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTGAGCTT	180
	TGCGTTAGTA CTCATTTTAT TTACAACTC CGAACTACTA ACCAGTAACT TCATGTACTT	240
	TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTATT	300
20	ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTTYATTT AGTTTCATGC GTTTTCAAA	360
	TGTAATGACG CCAGATAwGt TAAAYCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC	420
	TACTGGTTTT GT	432

(2) INFORMATION FOR SEQ ID NO: 697:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 782 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

35	CTTTTATACG AAAGTTAAaA TCAAATATAA CATTAAATGTT TGATGGGGAT TTTGCGGGTA	60
	GTGAmGCAAC ACTTAAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA	120
40	TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT	180
	TTACTGCTTT TGTAaaaaAT GACAAAAAGT CATTTGCACA TTATAAAGTG AGTATATTAA	240
	AAGATGAAAT TGCACATAAT GACCTTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG	300
45	ATATTTTCGCT TATGAAATCA TCGATTTTGC AACAAAAGGC TTTAAATGAT GTTGCACCAT	360
	TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA	420
	ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC	480
50	AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTTAAAC ATTTAATGAG	540
	AGATAAAGAT ACATTTTTTAA ATTATTATGA AAGTGTGAT AAGGATAACT TCACAAATCA	600

TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720  
 AGAACAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780  
 5 TA 782

(2) INFORMATION FOR SEQ ID NO: 698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 714 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTCGCT 60  
 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120  
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180  
 TACAATGATT TCGTGATGTT AGTTACCCAT TTTATGTGTT GCATAAAAATA TGTTGTTATA 240  
 AAACATTTTA AATCATTTTA TATAACAAT CTATATATTT TTGGCATTTC CAAAATATCA 300  
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360  
 TTGTAAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420  
 TTGTGATTTC ACTGAAACAT GGTAAATTGC GTTGTGATG AATAACTTTA GCATAAATAT 480  
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540  
 AACTTGTTAA AAATATATGA TGGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600  
 TGTTACTAGA AATTAATGTG TGAATCAGTG CTACTGTTAT TGGTATtGCG AACAAGAAAG 660  
 TCATTTGATT TCGTGTTATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

(2) INFORMATION FOR SEQ ID NO: 699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60  
 TTGGGATTTG nnTTTAATTA AAGAACCTTT AAGAATGTTA CAAGTGCGTA TCCCTGTACG 120

TGGACCAACA AAAGGGGGCG TGCCTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240  
 ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300  
 5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAGGAGCAT TCCATGAAGT TGGAACGTTT 360  
 A 361

## (2) INFORMATION FOR SEQ ID NO: 700:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 943 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

20 GTCCTTAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTTCCTT 60  
 AAAGGACCTA CAAGCTGTTT TAAATATATAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120  
 TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180  
 25 TATCTCCCTT TAGTAGAAAT TTTCAATTGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240  
 CCATTTTAGC ATTTTTTTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300  
 AACCATTAGC ATCGAGAATG CGCCCCAAAA ATATAGATGA AATCATTTCC CAACAACATT 360  
 30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420  
 TTTTTTATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480  
 CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAAGAT ATGCAACTTG 540  
 35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600  
 TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTTAGA AAATGGCAAA ATCGTCTTGA 660  
 TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTCGT TCAAGAGCGC 720  
 40 AAATTTTCGA GTTATATCCT TTAAATGACG AaGATGTGCG CCAAGCGTTA ACTCGTGCAA 780  
 TAGAAGATGA TGAGAATGGT TTGAAAmCAT ATCaACCCAA AATTGATGAA GATGCCATGA 840  
 45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900  
 CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

## (2) INFORMATION FOR SEQ ID NO: 701:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TTGTTCTGTT GATTTAGATA 60  
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120  
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180  
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240  
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTTAACGTTA 300  
 TAGCAGCGAT AAATGAAGGT TATGTTGGtA CTTTGCCAAT GAATGAAGCA CTAAAAAaT 360  
 15 CGCyTTGTTG TtATTCACGT kGATTATaTT GATGGGGaCA TTTAAAAAAT GTGAnTAAGG 420  
 AGCAAGGTTT ATTACAAGAT GTTAA 445

## (2) INFORMATION FOR SEQ ID NO: 702:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 752 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAATTTGT CATTGTTTTG GTTGTAaaaa AGGTGGCAAT GTTTTTCAAT 60  
 TTAactCAAGA AATTAAAGAC ATATCATTG TTGAAGCGGT TAAAGAATTA GGTGATAGas 120  
 TTAATGTTGC TGtagatATT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTckG 180  
 35 AyGATTTACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240  
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300  
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT 360  
 40 TTCTTCAAAA AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420  
 ACGAAGAAAA TTTCAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480  
 ATGCGCAAGG AAGAATTGTT GGATATTCAG GTCGAACATA TACCGGTCAA GAACCAAAAT 540  
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTtATAC AACTTAGATA 600  
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660  
 TTATAAAATC TGATACTGCT GGCTTGAAAA ACGTTGTTGC AACAATGGGT ACACAGTTGT 720  
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

```

10 nCGTTTTTGT nAAACnGCTT ATATGTATAA CTTTTCCCAA TTTATCATAA GTTTTGATAG      60
   AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTTCAATG ATAGGAATAT      120
   TATGTCtTTC GctATAAGTA ATTATATTTT TCTTTTGCTC ATTCGTTAAA GAACGACCTG      180
15 TCGGGTTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT      240
   CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA      300
   ATTGCTCAAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT      360
20 CTGACCTAA AAACCCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA      420
   TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC      480
   TTAAC TTGAT ATAACCATAG CCATTATTAT AACCAAAAGA TAAGTCTTCA ATATGACTGG      540
25 CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCCAATTCAC      600
   CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT      660
   ACTGACTTCT TTGTTGAGAG GACCATAACA TCATTTGAGA CCACTTATTT GTAATATGTG      720
30 CTTCAATTCAA ATAGTCATTA ACATATGkTC CACTACCTAC TTTAGTATAG ATAAATCCTT      780
   CAGCTTCTAA TAACTCAATA CTTTAAATAA TCGTTACTCT ATTTACGTTG      830

```

(2) INFORMATION FOR SEQ ID NO: 704:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

```

45 AGTGGTGTTG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAGTTTA ATAAAAAAG      60
   AGGGGTCAAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA      120
50 GTGCACTAGC AAGATACTTA ACTGAGCATT TAAAAACACA TGATATTGAA GCGGAAATAT      180
   TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG      240

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TATTAGGAAC GCCAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360  
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420  
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480  
 CTGTACCAAC TCAAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540  
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTTCGAT CAAATTGTAT 600  
 10 CTTTGTGAA TAATAGTCCA TATGAACATT TAAAATAATA TTAAnAAATA TGTAAATnT 659

## (2) INFORMATION FOR SEQ ID NO: 705:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

nCACCATATA GTAAGTGGCA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60  
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTC TGCATTTTCT ACAATTGAC 120  
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180  
 ATCCGTTTCGT TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240  
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300  
 GCTATCACTT GTTTGCATCA CATCATGAC AACAAATACCA CGATTACATC TAGACCTGAT 360  
 CTTGGCACTC CTGGGAAGGC GGAACCACTG CATACAACTA 400

## (2) INFORMATION FOR SEQ ID NO: 706:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

TTAAAAATAC AGCTACAGGT AATTTTAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60  
 GGTGTGGCGC TGTAATACCT TTAACCACTC AGAAAGAATG CACCTGGTCG TACTTTCAA 120  
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180  
 TCATTTGTTG CTTCTTTAAT AACTTGGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240



GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAGT TCTnACTGTA 360  
 CCTTTACAAA ATGCCTTGnn 380

(2) INFORMATION FOR SEQ ID NO: 707:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAnAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60  
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120  
 TAAAGAAACA CGACATATAG AATTTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180  
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240  
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300  
 TGTTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360  
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

(2) INFORMATION FOR SEQ ID NO: 708:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 447 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60  
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAACA 120  
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180  
 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240  
 CGAAGCGATG AAAGCTTTCC CTATGTTTGA TAATATCGAA TATACTGAAG ACATCGAAGT 300  
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGC 360  
 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAAATGGC 420  
 TAAAAGCATT GAAGCACATC CAAATGC 447

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

```

10 GTGTCTACCT GTTTTTGTTG TTCAATTGTT AACTTTTCTT TTTGAATAGT AGTATTCGAT      60
   AATTCTTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA      120
15 GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG      180
   TAACTTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT      240
   TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCGTGTTT GTTCTAACTT      300
20 TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGTATATG CATCAACCAA      360
   ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG      420
   TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTTGG TATATATCAT TAATCTGCCT      480
25 AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG      540
   TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTCGTT      600
   TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT      660
30 ACCAATAGAC ATATCAATTA AAAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT      720
   TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC      780
   TGTCATCTTC CTTTATTTAG CATTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG      840
35 TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC      900
   ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC      960
40 ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA      1020
   TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAAG TGTATATGtC TCaTTTTTAC      1080
   CACCTCATAA TGTTATTATA CGTAGTTTTA CTTAAAAAAA CTAATAATTA CTATAGTTAC      1140
45 TACTTTGTTT GTTTCAGTTC GTCAAACCTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG      1200
   TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA      1260
   GCCGATTATG AGGGATGGTG GTTATTCAGT GACTGGCCAG AAAACATTGT TGAAAAATAT      1320
50 CAATATCAAG ATTTTGATGA CATGTTTAAG CACTATCAAC AATTGATTAA TCAATGTAAA      1380
   GTTCAGTTCG ATAACATATG CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT      1440

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## (2) INFORMATION FOR SEQ ID NO: 710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG 60  
 GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAAGCTT 120  
 TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA 180  
 AAGATGCAGA GGCGGACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA 240  
 GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTTAATGCTG 300  
 AAGCATTGTA ACAAATGAAA AATGATGCAA TTTTATTAA TATCGGTAGA GGACAAATTG 360  
 TAGATGAAAC AGCATTAATC GATGCACTAG ACAATAAAGA AATTTTAGCA TGTGGTTTAG 420  
 ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGaCGT GaTAATGtTC 480  
 TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAACh 519

## (2) INFORMATION FOR SEQ ID NO: 711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC 60  
 TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC 120  
 CTAAGATCG TTAATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAACT 180  
 GGGGAACAAC TGATGAATTC GCAAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT 240  
 TAAAAGCTAA GTTAAAATTA TATGAACAAA TGATTTGCGA TGCACGTACA TTATCAGAAC 300  
 AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA 360  
 AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT 420  
 ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTTAACTCT AGCGGAAATG AAAAAGACAA 480

TGTTCATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600  
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTAAATGTC AATGTATTTA 660  
 5 CAGGTAATGT AATCGTAACT GATTTCCGAG ATGAAACAGG TACAATTTTCG AATATACAAA 720  
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTATCCTC TGATCTTGCT AAATCATTA 780  
 ATTGTCATTG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAA AATATGTACT 840  
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900  
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACTTTATC GATAAGTAGT CTCCGCATAT 960  
 TTTAATGCTA TTATAAATA AAAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020  
 AAGGGCATT TATAGGACTA ATAGTCTATA ATAAAAGGGG TAAATTTTAA CTAAAAGCAT 1080  
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140  
 20 CATCCTTAAC AATCTGTCTT TATATTTTTA GTCTCTAATA TGTGCACTT GAGCTAAATA 1200  
 TTCAATTGTT gTTTACTTtC AaTGCGaCgt GCTTtCtTc GTtCAaCaCG TgwGGTGCTG 1260  
 TATCATAAAA CCATTTTTCa ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320  
 25 GCCTTCATCA TCTAACGCAA CAAATGTAA 1349

(2) INFORMATION FOR SEQ ID NO: 712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCAT TGTTTGATGA ATTTGATAAA 60  
 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGAG AAGTATTATA TCAAGCATT 120  
 40 GGTGGAAAA TGCAACCAGA ACAACAAAAG TTAAGTCCA AAAACAGGTn GGCCTGAATG 180  
 GAACCAGGAG GAANTTGAAT ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240  
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300  
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTC 360  
 TGCGTAAAGA TTAAAA 377

(2) INFORMATION FOR SEQ ID NO: 713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

	AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGT TTTT CACTTATTTT AACACTTGTC	60
10	ATTGTCA TTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT	120
	GTTTTATGTC TCAGGATCCA GTTATTCATT ATATCTACAA TATTTACGAT TATATAAATA	180
	ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT	240
15	AATGGGATAT GGCATGTATA CGTTCTTGCC TTTTATCTCA TTTCCAATGA TTAATCTGGA	300
	TATTGTTCTA AAAATGCTTT CGCTTCTTTA TTAAGTGT TAAAATCAAT ACCTTGTTGC	360
	ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT	420
20	TCTATGGaAC GCTCATAACC TTTACTTTTC YTAAAATCAC TTGGCAAATA GTTCACaTCG	480
	TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC	528

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(2) INFORMATION FOR SEQ ID NO: 714:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 731 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

35	TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT	60
	ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT	120
	TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA	180
40	CAGGATAAGT TAGTTAAACA TTACCAAAAA CTAATTGAGT CATTGGCATA TAAATATTCT	240
	AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC	300
	ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTT TAGT ACCTACTGTA	360
45	ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAACTTGGA GTGTACATGT TCCGAGACGT	420
	ATTAAAGAAA TTGGGCCAAG AATCAAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG	480
50	cGTTcACyTT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA	540
	GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATTC CATTGAAGCT	600
	GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACcTTAT	660

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CGAGAAATCA T

731

## (2) INFORMATION FOR SEQ ID NO: 715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

TTTTIAGrGGa AAGCGaATTA GtCaTATwCg CaGCAGATwG aATGATTGaA AAmGaAAATTG 60  
aATTCGATTCC AATTGTAAGA AAAAAAGATA ATCAAAAGTA TGAAGTAATT GGAAGAATTT 120  
CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG 180  
GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT 240  
AGGGCAGGTA TTTCACAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA 300  
TATATTGAAT CTTTTGAAGA TGTTGATGAA GTGATTCAAG TTGCAAAAGA TACAAATGCT 360  
ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA 420  
GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG 480  
GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTT 540  
AAGAAAATTG ATGCGATAGA GTTTGCAGTT AAATATGATG ATGGTAAAGA TCCTAAAGGA 600  
TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTTCGAGAA CTTCAAAGAC ACCATTATCT 660  
CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC 720  
ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG 780  
AAGAnAAATT AAATCGCATT AGAnAAGAGC GACTAAAACA ATTAnGACTA 830

## (2) INFORMATION FOR SEQ ID NO: 716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

nGAAGAACAA GTTTAnCATC TAAATGCCCC TTTAAACTA CAACTACTTG ACGATGTTAA 60  
ATCAGTGTTT AAnTCTCAAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC 120

## EP 0 786 519 A2

AGAACGTATA AAAAAATACT TTAATAAGCA ACTCACTGAG CAAATTGCAC CAATCGTTCA 240  
 ACAATTAGCA GATTTACATG TCATTATTAA TCCTCAGTTT AACTTTGAAT CAGCTAATAT 300  
 5 AGAGCAACCA TTATTGCACA TCGATTTCOA CGATATGCTA AATGCATTGC CTAAACAATT 360  
 AACAAAACGT AAAATTTTGA ATCCAAATGG GCAAAGAGAT ATACATGAAT CAATTTGTCA 420  
 AAGTACGTTA GGATTATTAC AACCACAAAT GGGATTATTG AGGCAACAGC TTGAATTATA 480  
 10 TGTAAAGCAA ATGGCTGTAG AAGCTGAATC GCAATTTGAA AGTTTTGAAG CTAATATTCA 540  
 AACGCAAATA AACGATTAT TAGCATTGTA TTTAGATACA ACACTTATCA ATCAATTGAA 600  
 AGATAAACAT CAACAACCTGA AACTATTTTT ATATTAAGAA AGAAGGAACG TTTTAAATGC 660  
 15 CTAATAAAAT ATTACTTGTA GATGGTATGG CGCTATTATT TAGACATTTC TATGCTACAA 720  
 GTCTTCATAA ACAATTTATG TACAATTCAC AAGGTGAACC TACAAATGGA ATACAAGGAT 780  
 TTGTGCGTCA TATCTTTTCG GCAATACATG AAATACGCCC TACACATGTA GCTGTATGTT 840  
 20 GGGATATGGG ACAATCAACT TTTAGAAATG ATATGTTTGA TGGTTATAAG CAAAACGTT 900  
 CTGCACCACC AGAAGAATTG ATACCACAAT TTGATTATGT TAAAGAAATT TCAGAGCAAT 960  
 25 TTGGCTTTGT AAATATTGGC GTTAAAACT ATGAAGCGGA TGATGTTATA GGTACATTAG 1020  
 CACAACAATA TTCAACTGAT AACGATGTCT ATATTATTAC GGGCGACAAA GATTTACTGC 1080  
 AATGTATTAA TGACAATGTT GAAGTTGGCT AATTAAAAAA GGTTTAACAT TTATAATAGA 1140  
 30 TATnCATTAC ATCGTTTTn 1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

GATTTAATCA ATGCAGTTGC AGAGCAAGCT GATTTAACTA AAAAGAAGC TGGTTCAGCA 60  
 45 GTAGATGCTG TATTCGAATC AATCCAAAAC TCACTTGCTA AAGGTGAAAA AGTACAATTA 120  
 ATTGGTTTCG GTAACCTTGA GGTACGTGAA CGTGCTGCAC GTAAAGGTCG TAACCCCTCAA 180  
 ACTGGTAAAG AAATTGATAT CCCAGCAAGT AAAGTTCCAG CATTCAAAGC TGGTAAAGCA 240  
 50 TTAAAAGATG CTGTAAAATA ATTTTACTTA AAAAGCCCTG AATAAGGGCT TTTTATTTTG 300  
 CTTTTAATAC TTACAACCTG TACATAAATT GTAATGTTCT TCTAAGTTTT TAATCTTTGG 360

AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480  
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540  
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

## (2) INFORMATION FOR SEQ ID NO: 718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTGmAaTG GaGCACGCCC TTATTGATA GAAGTAAAAG ACATTTAATT 60  
 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGtGC ACTGTATGAT 120  
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGACTGGAAA CAGGACATAT AAACATGGGC 180  
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGCATT CCATCAACAA 240  
 25 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300  
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360  
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420  
 30 AAATATGAAA CTGTTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480  
 GACTTTTACT TGA 493

## (2) INFORMATION FOR SEQ ID NO: 719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

GCATTGCCAA AACAATACGT TTATATTATT GAGGAAC TAC TGTATAAAAG TAATGAATAT 60  
 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAACT TAAACAGGCA 120  
 GATGATTTAA TTATTGGACT CGCTTATTC GTACAACGCT TAGTCGTCGA TCATTTACAC 180  
 50 GTTGTCGGTG ATATTTATGA TCGTGACCA CAACCAGATA AAATTATGGA TACTGATT 240  
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300



GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420  
TACTATGACG CAGATAATCC TGCTTTTAAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480  
5 TTAACTCAAC GTGAAGAAAG TCAAATTACT AAAATTCATC AAGCTATTGC GATGATTCAA 540  
TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAATT TCGAAATGGA AGAACGTCTT 600  
GTGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660  
10 TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720  
GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780  
CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840  
15 ATTCATGGTT GTATTCCAGT TGATGAAAAT GGTGAGATGG AATCATTGTA AATTGATGGT 900  
CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATTT 960  
20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020  
AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080  
GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaAT 1140  
25 ATGGkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200  
GGTCACACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60  
TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120  
AGTATCTACA TTGTCCGGTG GGAATAAACG TAAAATTAAT ATATTAGTAG GTTTACTAGG 180  
45 TCAACCTCGA ATTCTCATTT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240  
TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300  
TCATTTAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360  
50 TTTTnTTCAA CAGTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

(A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10 CTTATTTTATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA 60  
 TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC 120  
 GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTTG 180  
 15 CTTTTTTTCAA ATAAGAAAAGT ATTAAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA 240  
 CTTGATTTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTAAAATAT 300  
 CCAGAAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA 360  
 20 AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAAGAGGG 420  
 AACATAGAAA AAGATAGGTT TTCAATTTCA ATCATTTTTCA AAGATACCTA TCACACCCTA 480  
 25 GTTAGAATAG ATATTAACGG TGGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA 540  
 AGTCATATTC ACATATATAA TGATAAGTAT 570

## (2) INFORMATION FOR SEQ ID NO: 722:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

40 ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA 60  
 GCACCTTCAT TATTGTGTAT AATTGAATA TTATTGCTT TTAAAGTATG TCCAATTAAG 120  
 TTTGAAGTCG TTGTTTTACC ATTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT 180  
 45 GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT 240  
 CCTCTTTTAC CTACTGCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC 300  
 CACTGTCTCA TGTGTTTCCT CcCAAATt CCACTCGCAT CATTATAACA TGACAAGGCA 360  
 50 ACTTCAAAAA AGTTTCTCAA TCACAAATnG ATACCAGTGT 400

## (2) INFORMATION FOR SEQ ID NO: 723:

55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1113 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

	GATTATATGC TGTGGCAA ACAATATACC CAGATGAATT TTTATTTTTA GTAATAGTAT	60
10	AACCATGCTT TGTCTTACTA ACTTTGACAG CTTCTAATGA ATTTGAAGCG TCTTTAAGCG	120
	TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTTACTCG ATACTTACCT TTAGGCAATG	180
	ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT	240
15	ATTTATAAGT GAGTTTATTT CTTTCTTGTG TATATTCATT CACTTTAACA TCATGAGCTT	300
	TATCCGGCGA AAGTAATTCT AAATCCATTT CAAAATACAA ATCTTTAAAT TGATTAGAAA	360
	CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTAACTTGT AATAAATGTT	420
20	TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTTAATTGT TGAATCTGAT AGTAAATTTT	480
	TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA	540
25	TTGCTTGTTT TTTATCTAAT GGAGATTTTA ATTCTTTATT GGAAAAGACC TTATTTGTAA	600
	TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAACT TTATTGTCTT	660
	TGTGTTTCTA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC	720
30	GATCATTAAAC ATTCCAAAGT GATAGTaAAT TTgACGATgC CAAGTAATCT ATAAGTGCTG	780
	TTTTTATCGA TTGGCATATT AATTTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA	840
	TTAAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT	900
35	GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT	960
	TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCAACGT TGATAATGAT	1020
	TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC	1080
40	ATaACGATTA ATACTAATAT TGCAACGGTT AAT	1113

(2) INFORMATION FOR SEQ ID NO: 724:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

55

TGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTTC AGTGTGTACT	60
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EP 0 786 519 A2

	GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA	180
	TTCATTTATG TTACGCCCCCT TTAAAATTAG TGTTTAAAAT GTCGAGTGCC TGTGACTACC	240
5	ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC	300
	GGTTGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG	360
	AAAAATCCAT CAGATACTAA CGgCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC	420
10	AATTTTAGCA GCACCGACAC GATTCATTGG CCAGCAnCTA TACC	464

(2) INFORMATION FOR SEQ ID NO: 725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

	GTAAATnCA nTATTTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC	60
25	AAATGACGCA AATTTTAATA GTAGAAGATG AACAAAACCTT AGCAAGATTT CTTGAATTGG	120
	AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA	180
	AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG	240
30	GCTTAGAAAT TTGTCGCAAA ATTAGACAAC AACAACTAC ACCTATCATT ATAATTACAG	300
	CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG	360
	TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTTA CGTCGTCAGC	420
35	CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTTAAAGTGA	480
	CGGTAAATGG CGCAGAAATT GAaTTAACAA AACAGAGTA TGATTTACTA TATCTTCTAG	540
40	CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA	600
	ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAAGTTAA	660
	AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT	720
45	GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACGATGATTA CGTTTGTAC	780
	GATATTTTTG TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA	840
	GCTTGATGAT GcAGAACGAA GCTCaAGCGA TATTAATAat TTATTTCaTT CTAAgCCTGT	900
50	TAAgATATA TCTGCaTTAG ACTTGAATGC aTCTTTAgGT AAtTTTCaAG AGATAATTAT	960
	TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA	1020

ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTT AAAGGGTATA GCTTGTTAAT 1140  
 TCATTCACTA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT 1200  
 5 TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC 1260  
 TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA 1320  
 TAAATTGCAA TTAAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA 1380  
 10 GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC 1440

## (2) INFORMATION FOR SEQ ID NO: 726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

TGATATTCCG ACTTGCGAGG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG 60  
 25 ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA 120  
 AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAACTGTT TTTCAAATTG 180  
 TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA 240  
 30 TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA 300  
 CTACCCAGCG GGnTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC 360  
 AGGCGGTGAT GTATG 375

## (2) INFORMATION FOR SEQ ID NO: 727:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

TAAAAAACTT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA 60  
 AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA 120  
 50 TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAAA AAAAGAGCTT TTATTATTAT 180  
 TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT 240

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360  
 AGGTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTTGTGATT TTTATGGATT 420  
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

## (2) INFORMATION FOR SEQ ID NO: 728:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATctACa GCAGTAGAAT ayCCTGTTTT 60  
 20 CGTctTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120  
 AGAATTTATA TTAAAACTCT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180  
 TTTTTCTTGA ATTTCTTTTT CCATTTCTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240  
 25 TTCTTCCATT TCACTTAAAA TCTTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300  
 CTGATTGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTC GCAAAGTAAA TTGCATCAGT 360  
 AATAGAAGCA ACATATGGAT TAAAAACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420  
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480  
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATAACTG GCCAACATAA TATCGAAAGA 540  
 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600  
 35 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTCGACAT AATTATTTAT 660  
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAAtATT 720  
 40 ATTTcGCAAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780  
 AAAATCcAAT ATTATCAAAA GACGTTTCcA ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840  
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTAAACAAT 900  
 45 TCGATTTTTT CTGTGTGTTT ATCTtGAKGA GTCATTAAAG TATCTTCaAG TTTTACTTCa 960  
 ATCGGACTAT CTACATTAAc CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020  
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTTCAT CTAAATGTTT ATAGACACCT 1080  
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140  
 CCTGGTATAT TATCAGAAGT ATCTCCCAT TATCCTTTCA TATCAATAAT TTGATTAGGT 1200

CCTTTTTTAG TGTAATAAAT GGTTACATTA TCCGTTGCAA GTTGTGTAA ATCTCGGTCT 1320  
 CCCGTAATAA TAATTGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA 1380  
 5 ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT 1440  
 TGGCGAATAT AAGGAAATTG CTCACCTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA 1500  
 TATTCACATAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA 1560  
 10 TGATTGGCT TTTCTTCTTT TAAAATCTTC TCTAGTAACA TTGCAAACC ATATACTGCA 1620  
 TTGGTATGAA TGCCTGCTTT GTTTGATAAC AAAGGTAATG CATAAaAGC TCTAAAACTT 1680  
 15 AAGCTATTAC CATCGaTTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA 1740  
 TATATnTGTG 1750

## (2) INFORMATION FOR SEQ ID NO: 729:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA 60  
 30 CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTCAT TCGATATTCT AACGGAAGAA 120  
 TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA 180  
 35 CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA 240  
 AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT 300  
 TTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA 360  
 40 TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTCAGGTGG ATTATTGCAC 420  
 TCAAATATGC nGnTATACG 439

## (2) INFORMATION FOR SEQ ID NO: 730:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAAACCTGC ACGTTCTGCT 120  
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTCAAC ATCTGGAAC 180  
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240  
 TGACCCACG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300  
 10 CCTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360  
 GATAATTTAG GCTCCGTTTCG TAAAGCAATA TCAGATTCTT CAAaTCCTGA GGCATAACCA 420  
 TTTGCATGAT ATGCTTCTAG CTTTGTCTTC AATTCATCAA AGGGnTCGGC AGTAGTAAAT 480  
 15 C 481

## (2) INFORMATION FOR SEQ ID NO: 731:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 828 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTTCT ATTGATTGAG AAAATAGTTA TTTATATAGT TTTTAAAGAA 60  
 AAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120  
 30 TTAAATGAGT AGAGGAGGCT GCAAWTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180  
 CACAATGAAA GTAAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCTTT mGCTTCTTTC 240  
 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300  
 35 CCTCTATTCT TTATGGTGAC TAAAAATCTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360  
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420  
 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480  
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540  
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TAAAGTTGA TAATGTAAGA 600  
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAAATGAAA TTAACGAACA AGATAAGTTA 660  
 GATGGAGAGC TATTTTCGTAA AAATTTTGTC GGTGTGCATG ATGGGTCAAC GAATAAATAT 720  
 ATACATGTTG GGTTACAACC TGAAACCAAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780  
 50 TTTTAAAT ATTTTGATGC GCCTCAGCCG TTCAAATCA TGGCTAGT 828

## (2) INFORMATION FOR SEQ ID NO: 732:



(A) LENGTH: 1622 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

10	CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAACTAAGAT	60
	TGTAATTATC CCCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA	120
	TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTTAAAT	180
15	CaTTAGaATG TATAAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA	240
	TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA	300
	TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT	360
20	TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACACTA AAATATTTAA	420
	AACTAACACT ATTTATTAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA	480
	TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTTGAAGTA TACTATAGAG	540
25	TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGGA TTAACACTTC	600
	ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTTT AAAGACGGAT	660
	CTGTTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT	720
30	TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTTAAC AATATTTATT CTCATAGAGT	780
	TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA	840
35	TTTTCTAATA GAAAATAACT TTAGTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT	900
	AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG	960
	CTGCGCCATC CTCTTCATTC GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTTCAG	1020
40	GGCGTGCAAT TTTCATAGCA ACTGTATAAT GACCAAATTC AACATTGCT CTATCATTGT	1080
	CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTCTTT	1140
	TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT	1200
45	TTGArACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA	1260
	TTTTTTCTAA ATTAGAAGT AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG	1320
50	TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA	1380
	CGCCATTAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCATGTTTCA TCTTCTTTTA	1440
55	AAGAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTGTTGG CGCTTAGCTA	1500

CTACTTCTCC AATTGTTCCA TTTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620  
CA 1622

(2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAnAT AAATCCAAAT TCTTTTAACG AACAAGAGTG CCCAAGTTAT TGCTGATCGT 60  
TATGCCAGAT AnGCATATCA ATGATAATTA TGGTTTAGAA AGAATTTCTA AGACAAATCA 120  
TGGATATAAT TATGTGTATT CCAATGATAA TTCAACTAGT AAGCAACATG TAAGTATTTT 180  
AAATCAAGGC ATAATAACGA AATAATAGAT GGAACAGTGT ATTCTAATTG GATATACTGT 240  
TTTTATTTTG CAATAATTTA ATTTAAAAAG GTGAATTCAA CTTATAAAAT GATGTAAATG 300  
TTATGTCAAA ATCAACCAAT CCGTAATGTA TTTTAAATG TTAATATAGT TCTGAAGAAG 360  
TATAAATGAG GTGTTGAAAT GGCTAAAAAT AAGAAAACgA ACGCGATGCG TATGCTTGAT 420  
CGTGCAAAAA TTAAATACGA AGTTCATAGC TTTGAGGTAC nTTAAGAACA TT 472

(2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA AATTTTTTCT ATTATTTGTT CACGAGTAAA GATTTGCTTA GGACGTGCTG 60  
CAAGCATAAA TAATAATTGA AATTCCTTGT TCGGTAACGT CATCGTTTTA TTAGATACTT 120  
GGAGTTCCAA ATAGGATTGG TTTAGCGTTA AGTTGCCAAT AGTCATTTCT GAATTTGAAT 180  
TGATATTATA TCGACGTAAT ACAGCACGAA TTCTAAAAAT AAGTTCCTTA ACCTCAAAGG 240  
GTTTGGTTAC ATAATCGTCA GTACCGCTTA TAAACGCACG CTCTTTGTCA CTAAGTGCAT 300  
CCCCGCGCTGT TAACATAATA ACTGGTATAT CATAATCATT TTTTAATGTA TTACATAATT 360  
GAAAGCCGTC CATACCATCC ATCATAATAT CTACCACTGc AATATCGaCA CGCTGTTTTT 420

GTTTTGThAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

## (2) INFORMATION FOR SEQ ID NO: 735:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTTCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60  
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120  
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180  
 CAGAAATCCC CAAACGGTAA ATTGTGGAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240  
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGGAAA ATTTGTATTT AATAAAGGAT 300  
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAAACCTT ACAAGGAATA 360  
 GGCATTGCGC TGGGCTGACC ACCAGGGTTT AnGTGnCCnC 400

## (2) INFORMATION FOR SEQ ID NO: 736:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 780 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60  
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120  
 TCGTAGATAA AGATCAATCA AGTGAAACGA AATTAATCTT AAACCTCTATT GGTAAAGGGA 180  
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240  
 TAAAAAAACA TAAACTTCAA GGCTATTTTG TTTTGTGATAA AGGTATGACC AAGGCATTTT 300  
 ATAAACAAGG CGAACTACCA ATTTTCAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360  
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420  
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480  
 CTGATTTGCT GATtACAGGA TTAAACCGTT CAGGTGCatT TAACTTAGAA CCGATTCATT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA 660  
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTG TACGTTGATT ACATGGTTTT 720  
 5 ATACTATGTT ATGGGnGTAT CnTGGTGTA GTTTGGAATG TGGTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 946 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTTnATTnTG GTTTTAAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60  
 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCCTATA 120  
 20 GTCTTGATTG CCTTGTA AAA ATGTTAGTAT TAATTGCTTC ATCGTTTCGA ATTGTTGTGT 180  
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTTCGAAA AGCTTTTCAA AACATCTATT 240  
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300  
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAAtAA ATTGAAATAG 360  
 TTCATTGAAA TTAATAATC GAACAAATAC TTTGGCACGC TGACTTCGAT CTTTCGGATT 420  
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGTAGCCAGT TGAGCTGTTA AATCAATTGT 480  
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGATTTT GTGGTGGTTC 540  
 AGTAATCTTG GAAACGAGTG AACGGAAGTG TTTAGGACTA AAATGCAAGT AATTCTTAAA 600  
 35 TTGATTTGCA AAATTTGTAT GACTGTAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660  
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAACAAGT TTAATACTTG TAAATAATC 720  
 TTTAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780  
 40 GCAATGCATC GCTATATCTT TTAAAGACAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840  
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAATATT CATGATCTAT 900  
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID NO: 738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

5 TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAAGTTC AAGCATTAGA 60  
 AGAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA 120  
 ACAAATGAAT GATTTATTTA TGCACTTAAA GGAATTATTT TCCGAAGAAT CATTTGCTGA 180  
 10 AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAAAT 240  
 ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA 300  
 TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTCmCyGcAT TTTTaATGCC 360  
 15 ATTCGGTAAT TAATCCGGAT GGTCCAATTT AATTAAC 397

## (2) INFORMATION FOR SEQ ID NO: 739:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 915 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

CAAGGTATTT CATTTGACCC ATTCACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC 60  
 30 TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT 120  
 TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAs ATATCAATCT 180  
 TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAAGTAC 240  
 35 ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG 300  
 CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT 360  
 ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC 420  
 40 TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA 480  
 TAAAGTGGGA TTAAAAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA 540  
 45 ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTCGATGA 600  
 ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAAAGTAA TGAAAGACCT 660  
 AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTTG CCAAAGATGT 720  
 50 AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA 780  
 AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTTC TTAGCAAGAG TATTATAACA 840  
 55 ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT 900

## (2) INFORMATION FOR SEQ ID NO: 740:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

```

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GGCGGTAGAT      60
TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA      120
CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG      180
GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG      240
ATTATCATCA AGATCAAATT CAATTTAGTG CATCATTAGA AGATATTCAT TTAAATATTG      300
AACATGgAAT TAATTAAACG TATCGGTGgA TGCTGGTGGT AAGTTGCATA CTGGACGCgT      360
AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACTCT GAAGAAACAA GTGCAAGnnn      420
TCATCGCATT GGATG                                          435
  
```

## (2) INFORMATION FOR SEQ ID NO: 741:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1198 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

```

AATATCATAA CCAAAGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT      60
CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA      120
TCACCAAAGT CAGAATTTAT TGAAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA      180
ATACCTGGCG ATTAATAAAC TGTTTCCGTT TTTTAGCACT TAATATATTT AAAAAGACAA      240
ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAACTACC      300
CGTCTTTTTCa CAaCCAAaGc TaCAAAAaaG aTgGCTAGTT ATTCTTTTCGT CACCCGCTGA      360
ATCATTAGTG TTGTTATTTT CTTTAACTTG CACGTCTAAA TCAAGAACTT TTTCCAAaGA      420
TaAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC      480
CACACAATAA ATCAATGAAT TTAATAATAA TTATTTGTTA TTAATTTGTA AATCGTCATT      540
  
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TGAATATTTT TTGTTTAACT CTAAATTTT GGGTTTAACT TCCTCTATTT CTAACAGTTA 660  
 TACTCCAGGA TTAGTTTCTT TAGAATCCGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720  
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TTTTTGTAGT TATTTCCAAC 780  
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTTGGT AAGTTACTTT 840  
 10 GATTTTAGAT TTTTTTGTAT CATTTTGTTT ATGAGAAAGT ACGCTTATAA ATTCTGGGTT 900  
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTTGGC AAGAAATTTT GACCAGCATT 960  
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020  
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080  
 TGATTTATGA TTTGTTTTTC TATCAATCGT AGTTCTGTAA CTTTCTTGTT TATAATTTAT 1140  
 CGTTTCTGAA AATGATTTTG ATCCATTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198

(2) INFORMATION FOR SEQ ID NO: 742:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 818 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:

GTGGCATATn CAAACTACTA CTGAAAGATC AATTACATAC GTACAGATTT TGCAAAATGA 60  
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAAACGTAA ATCTGTAATT AATTcAGATG 120  
 35 TTAATGTAAC GGTAAGAT AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180  
 AAACGACGAA AAGAATTGtT GTTGTGCGAA AAATAATTAA GGTAAGTTAA ACAGAAmGA 240  
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAAG 300  
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360  
 TGTTTGTAC ACAAACTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420  
 45 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAATCTGA TGTCTTTAA GCAGCGCATA 480  
 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540  
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600  
 50 TATGACAATT GGTATTGTTA GCTTTTGTA CGACCATACA TGATACCGAT GATGGTCGTT 660  
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAAA ACATAGTTTG aTTTGAATGT 720  
 55 GgCTTTGGAA AATAATCATC CAtTATATCa TTtTGGATTn TATTTTGGAA GAAGAAAAGA 780

## (2) INFORMATION FOR SEQ ID NO: 743:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

	TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA	60
15	ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA	120
	AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA	180
	CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT	240
20	ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTCAGAAT TAAGTGGTGG	300
	ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC GAAAGTGAAG TTTATTTTCT	360
	AGATGAGCCG TTTGTCGGAA TTGATTTTAG TAGCGAAAAA tTAATCATGA CAAAAATcGA	420
25	GAACTTAAaA CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA	480
	GCAATACTTT GATCGCATTa TTCTATTAAA TCAAACATTA CGATACTTTG GTGATAGTGA	540
30	AGAGGCTATG AGTGTCACTC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA	600
	CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTCG AACATTTATT TACATATCAA	660
	TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT	720
35	AGTTTAATTG TATTACGTGG TCTTTCATTA ATGGGAGATG CAATGAGTCA CGCAGTATTA	780
	CCTGGTGTTG CCCTATCATT CTTATTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT	840
	GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACATCTA GTAGTAAAAC GAAACCTGAC	900
40	GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA	960
	ATAAACACTA CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT	1020
45	AGTGCAATTT TAACAACAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC	1080
	TATCGTCCAT TAATGATTTT TACATTGCAT CCAACGTTTA GTAGAATGAG TGGTCTAAAT	1140
	ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAGnAACAGT AGCAAGTatT	1200
50	CmAACGGTA	1209

## (2) INFORMATION FOR SEQ ID NO: 744:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

	CCGCCTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCAACATT AAATACGTTT	60
10	TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTTCGTAT AATAAGAAAA AAGGAGGTAA	120
	GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG	180
	ATTCAAATAT GTCTCAAAAG AAACCTTGCTG AaCTCATTAA CATAAAACCA TCTACTTTAA	240
15	GCGATTATTT AAATTTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG	300
	TTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT	360
	CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC	420
20	AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAAACAGG	480
	AGAAAACCTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG	540
25	ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA	600
	AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA	660
	AAACTCACAA TnTGA	675

30 (2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 924 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

	CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA	60
	TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCGCT GAAAATACCT TTATCTTGAA	120
45	ATAAGTCAAC TAACTCTTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA	180
	CGTGGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA	240
	TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC	300
50	AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC	360
	ACCCTGAATG GTTGGACCGA ATATTTGAG TACAGGAATT TTAGCCATTA GTTACACCTG	420
55	TTCCTTTGGT CTAAATACGA CATAACTTGT TGGTGTCTCT CTTACAAATA CTTGAATACA	480

TACGATTTCA GTTGAAGGGA TTTTGT TTTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600  
 GTCAAATTTA CCGTGTATCA TCTTTTTC AA ATGGCTAAAG TTCACTAAGA AGCCAGTGTC 660  
 5 ATCTAGTTTA TCACCGACAA TTGTTAAaya cAAAGTAAAGT ATGACCATGG ACATTTTGAC 720  
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780  
 10 ATTCGAATTG ATATGGATGC GTTGTACTAG GATAGATTTG TTGTAACATT TTAAAGCGCT 840  
 CCTTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900  
 CCACAGCCAT CCCCAATGAT ACCG 924

(2) INFORMATION FOR SEQ ID NO: 746:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

25 ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTTAG TTTTGCTGTT 60  
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120  
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180  
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTTAACT GGTTTTATAT 240  
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTTAGGAC 300  
 35 TACATATTAC GCTTTTGGTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360  
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACCmCGA 420  
 TTtCCAACTA rGATkGAATT kGGACCmCTA ATkGTTAATG GTcctCCTAG TAAATTGGAA 480  
 40 GCTTGTCCAT TaCTTCcATA TAAAtAACCA ATCCGCCAGC AAAtCCCcAT GGtKGAAGTC 540  
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCA AGCGCTGCAC 600  
 TACCATATGC CCTTGCACTT CTAGAATCAT TAACAATTTC TTTAAAGATT TCTCCTAAAA 660  
 45 TTGGTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720  
 TCAATGGTTT CAAGGGTTGG CTACCACGAT ATGCACCTTC CCCTACTTTA GCATGATATA 780  
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840  
 CAATTGAAAT TGCGAATTT TCTTGTTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900  
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

## (2) INFORMATION FOR SEQ ID NO: 747:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT 60  
CACCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCTTT AATATCGACA TGAGGTTTAG 120  
TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT 180  
GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCTTTG ACGTCTCTCT 240  
GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC 300  
AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA 360  
TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAAC GATAAACACT TATAGTTTAC 420  
ATAATAATGT TATCGTAATT ATAGCACGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT 480  
CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA 540  
CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT 600  
TTTTCGGTCC AACTTTTGA TCACCAACTA ATGGGAAGCC AATATATTTT ATGTGAACAC 660  
GGATTTGaTG CGTACGTCCT GTTTCAAGTT GACATTCAAC AAGCGTATAA TCTTTAAAT 720  
GTTCTAGTAC GTTAAAATGT GTCACTGCTT CCTTACCATC ATCAACAACA GCCATAGATT 780  
GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT 840  
TCCCGTGGAA CTAAAnCGAT ATAGT 865

## (2) INFORMATION FOR SEQ ID NO: 748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA 60  
AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA 120

TTTTAGGTTT TTCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA 240  
 TGATTGAAAC TAAGAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA 300  
 5 TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTTAAAA ATCTTCAATA 360  
 CAATAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC 420  
 CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC 480  
 10 CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTTGTAAA AAAAGTACTA ATAGGGCCAT 540  
 CTGCGTGAAC TTGTAACCAT AAAGGGAAGA AAACAGTTAT GAACCCTTTG AAAATATCTA 600  
 GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG 660  
 15 TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAAA TAATTTTCCA ATTACGAATC 720  
 CACTTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA 780  
 20 TTACACATCC TTTAATATCT TAGGACTATT TTATCATA 818

(2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

ATATCCAATa ACTGTTcATT GTCTTGATAT TCCTTAAATG TTTCATAATG CTCATTAGAA 60  
 ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTTCCTCTT TATTAATTAT TACGCCATCT 120  
 35 TCTAATTCAT ATTCTATAAT TCTGCCGTGT TCATTACAA TTTGAAACCT TACTGCTTTA 180  
 AAAGTTTTCA TATTCCACA TCCCATAGT TTAATATTTA TGATTTTTGA ATTATTTAGA 240  
 AGATTTAAGG TCATTTcATG ACTAATTTCT TTAAATATAA CAAATAACGA GATGCTATAG 300  
 CTATTAATTA TATAAAATTT GcCATTTTGa CCATTTTAA GCTAGTAATT AAGATATAGG 360  
 cATAGGAGGT GAATCACACA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA 420  
 45 AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC 480  
 ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT 540  
 TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA 600  
 50 CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCCTGAAT 660  
 TATATGTTGA AACAATAAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG 720

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TCCAATTATC CTAAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840  
 AATTAACTTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900  
 TCGnCTTTTG GTGTAGTTTT CCTAATAGAn AATAGACnTA GGTGCCCCAA CCGATTACAT 960  
 AAAAAATTGC C 971

(2) INFORMATION FOR SEQ ID NO: 750:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 832 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

ATAGATTACT CTTTGTATCT GTAGATCCTA CTGTAACGAC ATTGTCCATA GATGCAGGAA 60  
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTTTGTGTCAT 120  
 TGACATCAAT ACCATCATT A CCAGCTGCAG CAACAACGAT AGATTTTTTC TTCTTGGCGT 180  
 AATTGATTGC TTTCTGTAAC GCATCGTATT CTACTTTTTC ATCTTTTCTA AATGTTTGAT 240  
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300  
 CATTTCGAGC TTGAACAATC GCTTTTGATA CCCAAAGCAG TTCTGTTTTT TTACTIONACAA 360  
 ACACGCGATA CATTGTAAAT TTGTTATTCG GTGCAACACC TATTAACCTA CCATTAGCAC 420  
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCCTATC ATTGACATCG TGAACATCAC 480  
 CTGTTTCCTC CGGTTTCAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540  
 TCGAGAAATT ATTTTTCAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600  
 TTTTGGTGTT AGCATGTTTT GGCAATCAT CATACGATGC ACCATTATTG GTTATTTTAT 660  
 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGATGT TCTGTCTATT GTTTTCTCGC 720  
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTAAc ATCATTTTTA TAGTTTGCTA 780  
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

(2) INFORMATION FOR SEQ ID NO: 751:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GTAATATCAA TCTCTTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTGG 60  
 TCACGAACCG CTACAATAA CATTTTATCG TCTAAAATAA GTTGTTTATA TTTTCTAAT 120  
 5 TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTTAAC 180  
 AGTTTAGTCA TTCTATCACT AAATGTTCCA CTTGTTGAGA TAAGGGAGAT TTCAGAGTCG 240  
 TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA 300  
 10 CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTCGC CAGTGTCATT TACTACAGTA 360  
 ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTTGTTTAT tTAATCTTTT ACCCTTCTTA 420  
 TnATAAAGTA AAACCCTTAC ATTATTAAGT nATAAGTCTT CATTTCGCATT AAACG 475

(2) INFORMATION FOR SEQ ID NO: 752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1019 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT 60  
 CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT 120  
 30 AAACCATTAG AACAACGTGA ACACGCAAAT GTTATATTAC CAAATAACGA TCGTCACCAA 180  
 ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCTT ATATTCAAGT TGAAGCACCT 240  
 ACTGGTACAT TTATTGCTTC CGGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA 300  
 35 CACGTCGTAG ATGCTACGCA CGGTGATCCT CATGCTTTAA AAGCATTCCC TTCTGCAATT 360  
 AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AAATCACTAA ATATTCAGGC 420  
 GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA 480  
 40 GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT 540  
 GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC 600  
 45 ACTTACCTCA AAGGCGAACT ATGCAATATG ATTTAAGTAC AACTGGTGGT AATTCAGGTT 660  
 CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG 720  
 AATTTaATGG TGCGGTATTT ATTAATGAAA ATGTACGCAA CTtCTTAAAA CAAAATATTG 780  
 50 AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA 840  
 ACAATCCTGA TAACCCTAAC AACCAGATG AACCAAATAA CCCnGACAAC CCTAACAACC 900

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA

1019

(2) INFORMATION FOR SEQ ID NO: 753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

15	ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA	60
	TCTTGTGGCA CAACATGAaT CGCATTTTCA AAAATTGCAT GTCCTGCTTG ATCAGTCAAA	120
	CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTTGGCGTT	180
20	AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTCTT CATCTACTCC AAAATTACGT	240
	AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA	300
	GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTT GATTTGTTT ATTTCATTG	360
25	TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAAACA TTGCACCGCC ATCCATTTTT	420
	GTATTGCCAC CATTTAGaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT	480
30	CTTCTGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT	533

(2) INFORMATION FOR SEQ ID NO: 754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

40	ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC	60
	GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC	120
45	TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt	180
	TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTTCA AGAAACTATt TAGAGTCAAA	240
50	AGGGTATGGA AAAGAATTTG GACATTCACT AGGACATGGT ATTGGTTTAG AAATCCATGA	300
	AGGGCCAATG CTGGCTCGTA CGATACaAGA TAAACTTCaA GTTAACAACT GTGTTACAGT	360
55	AGAACCTGGT GTTTATATAG AAGGTTTGGG CGGTATAAGA ATAGAAGATG ATATTTTAAT	420

AGCGTGTAAG ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540  
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600  
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660  
 AAACGTTTATG AGCTGGTGAA AAAGTTGAAC CAGCAATGaT TGaAAATCGT cGCATGCAAT 720  
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780  
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840  
 AAATTCAAAC ATACGAAGGT GaAACTATCG GTGTTGAATT ACCTAAAACT GTTGAATTAA 900  
 CAGTAACTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTaAATCGG 960  
 15 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTATT TGTAACGAA GGTGACGTTT 1020  
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTTAAC 1080  
 AAATAGCTTG TATTCATAT ACTGATTTAA CGTAAGAnAT TCTAAATAAG TCTCATAAAG 1140  
 20 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTATT TTTAAATAA 1200  
 TTTTAAAT ATAAAACGAA TCGTC 1225

(2) INFORMATION FOR SEQ ID NO: 755:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

35 ACAACAAAT CACTTAGTTA AAATTGACAG TGCATTATAT TCCGATAAAT TATTCAACAT 60  
 TGTAAGAAAn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120  
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180  
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240  
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300  
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360  
 GTAGGTCCTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420  
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480  
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540  
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAAACAC ATATAAATTC TAGAATATAC 600



TATGATTTGC CTTCAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA 720  
 ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC 780  
 5 CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTTGAAGAA 840  
 ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA 900  
 AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTTTAAGG AGGAAATAAG CAATGGCAGA 960  
 10 AGGACAAGGT TCTTATAAAG TAGGTTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA 1020  
 AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT 1080  
 15 AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG 1140  
 GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCa TGaGTaTTTT CaATATTCCa 1200  
 AGTGaTGaTT TAAaCACaGT TaTTGGaCGT ACTAAAGATA AAAATGGGTA CATCTTGGGT 1260  
 20 AGGAG 1265

## (2) INFORMATION FOR SEQ ID NO: 756:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

CATATACCCG GGTTCaAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT 60  
 35 ATTGTTAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT 120  
 TTGAAATCCA GGTtGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA 180  
 GGCCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG 240  
 40 TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGATA GTAATCAGAT ATTTGAGCTA 300  
 CTTcATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT 360  
 TGTTAGCACC TTCTTCGTA TAAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA 420  
 45 TAACTAGCAG TTTTTTATTA TGATTTTTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT 480  
 GCATGCCATT TTCTTTATCA TAAGTACTA AATCACCTGT TTTTACTGTA GTATTGCTTC 540  
 CAATATCTGT AGTACCGGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT 600  
 50 TCATTAATAT GGAACCTAGC AATAGTGTTG TTGTTACTGA GCTGACTATA CGTGTTTTCA 660  
 TTTTCATCAT CCTTCTATTT TTTAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT 720

GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTTAAGAATA TGTTTTTAAAC 840  
 TTTTATTTAA AATTTGAAAG GAAGCATTTTC AATTTTCGAGG GTTAGTCAAA GTTGAATAAA 900  
 5 TTCTTTATGA AACAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTAAAACTAA 960  
 TGATTTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020  
 10 TAAATCAATT AATTAATAT TAAATAAAAA TTAATATAT ATTAAGTAGT GTAAATTAAT 1080  
 AAATAGAAAT AGAGAAAAAG GGTATTAAAT A 1111

## (2) INFORMATION FOR SEQ ID NO: 757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAT AGGTACATAA TATTTTTAGG GTGGGTTATA TGAGCATAAT 60  
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120  
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180  
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAT AAAATAATTG GTTTAAGTGG 240  
 30 TATGTGTAAA ATGATGTTTT ACGAAAwAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300  
 TATACATTCT GAATTTAGGA AAAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360  
 35 ATTTTCTAAA CGGTTGAATT GTAAAGCmAT AaCACTAAAT AGTGGTAATA GAGATGAnAG 420  
 ACATCTGCAC ATAAACTATA TAGTGATAnT GGGTATGTTA GCAATA 466

## (2) INFORMATION FOR SEQ ID NO: 758:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60  
 50 TATTCCGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120  
 TTGTTTTTTA AAGATTTTAT GTAATCtCTA TATTTAAATT CGAATATTCT TTTTATACC 180

AACTAATATA TwCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300  
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360  
 5 TGTGATTTCG AAGTGTGCGC CCTAAAACAG rAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60  
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120  
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180  
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTTCAG 240  
 25 GGAAACTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTTCC GTGGTTAATT 300  
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGTnnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60  
 40 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATCt AGGCTACTAT TATCTATTAT 120  
 TTAAATTTA CCTGTGTGGG TAGTGTGTGTT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180  
 45 AATTGTAGcT ATTCCTTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240  
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGGCGACC GTGTTTTACT AGCTATTTAT 300  
 TGTTTTcAGT TTCTTTTGTA TCTAACAATT TCACTTTGTG ATTTTCCCAA TCAATTTcAT 360  
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

(A) LENGTH: 639 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

10 GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA 60  
 CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA 120  
 TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT 180  
 15 ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA 240  
 TATTCACCTA AAGTTGGAAT TTTAGCATT TATTATTTT GTACTTTAAA TTATTTAGTT 300  
 CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTGC TGTGTTACTT 360  
 20 ATGCTTTTAG TTTATATATT TTTAGGAATT TTAAAGAAAT GACATGAAAC AAATTAGCAT 420  
 TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA 480  
 25 AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAAATGA 540  
 ATATGnAAGC GGAACCGCCG TTATTTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT 600  
 GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA 639

## (2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

40 nTGTTTCGTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT 60  
 CTTTTAATAT CATTCTTGCA ATAGTGACTC GTTGTTTTTT ACCACCAGAC AATTTATCTC 120  
 45 CCACTGTACC AACATTCGTA TCATATCCAT CTGGCAACTT TTCAATAAAT TCATGACATT 180  
 GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA 240  
 TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT 300  
 50 CGTTAAGTTG TTTCGATTCA ATATCTTTTA TATTTATACC GCCAATCGTA ATTTACCTG 360  
 AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGACTTACCG CTACCAGaTG 420  
 55 CCCCACGAT AGCTGTGAAA TTATTTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA 480

GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACTT 600  
 CAGTTAATGC GTATTGTATA GACTTTAAAT GATTTACATA ATTAGTAAAA TTCTTAATCG 660  
 5 GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT 720  
 TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC 780  
 TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT 840  
 10 AATTATCTAC TG 852

## (2) INFORMATION FOR SEQ ID NO: 763:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT 60  
 25 AAATTTAGAT TGATTTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GGCGTTTGCC 120  
 TTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAT 180  
 30 AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT 240  
 TACTTCAGCG TTCaTTCCaG GAACAACTTG TTTAGACGGT TcTGATTCTA GAGTGATTTT 300  
 AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTAA 360  
 35 TGAAAgtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT 420  
 TGACCGTCAA TAGTCACATC AACATCTTTA CCTACTTCAA CATCTTTAAT ATCTTTTTCG 480  
 TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA 540  
 40 GCTTGCACCA TTGAACCTTC CATACCATCT AATTGGCAA TTGTACCTTT TTGAGGCATT 600  
 TTAAGATCCA TATCTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG 660  
 TCACCTTTAT CGAGTTTGTC ACCTTGTTTA ACATTAAGTG ATTTAATTTG TCCAGATGCA 720  
 45 GGACTTGCTA TTTAATTTG ATCGCCATTT ACTTTTGCAT TATCAGTTGT TACATAGCTT 780  
 GTTGTTTTAT TCCAAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACCAACGTA 840  
 50 ATGACATTnA AT 852

## (2) INFORMATION FOR SEQ ID NO: 764:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

	ACATATTCGA CATTCAATTTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC	60
10	CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTTGATTT	120
	ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTA	180
	YTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT	240
15	TATTTTAAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTTGGG TATGCAGCCA	300
	TTTTTATATT AATTTkATka GAAAATGTAC TACCTaTCGT aCCATCGGga AATTATTCTG	360
	ACATTTGCTG GTCTTATGTC TGTAAATCA CATTTATCAA TTTTAACTTT ATTTATTATT	420
20	GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTC	480
	GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG	540
	GATTTAAAGC GAGCAAATGA TTGGTTTAAA AAGTATGGCG TATGGGCTGT ATtkATCTGT	600
25	CGTTTCATAC CTGTATTACG TGTaTGATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT	660
	GTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT	720
30	TTACTAGGAC GCACTTTGAG CGATAGC	747

(2) INFORMATION FOR SEQ ID NO: 765:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 820 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

	TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA	60
45	TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTA ATGGCATGTT TTTCTCCATT	120
	TTCCAACATA TTGACATACA ATTTATAATG TTTTCAACT GCCTGAATAA AAGCGAGTTG	180
	ATTTTTATTT AAATGTGATT TTAACFTTTC TAAATCTGAA TTAATAAAGT CTTCATAGT	240
50	CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG	300
	TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT	360
55	AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT	420

TGTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540  
 CGCTTTTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTGA GCTGCTGATT 600  
 5 ATCACGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660  
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720  
 TGACTGACGC AGCTCATTTA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780  
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTATnATT 820

## (2) INFORMATION FOR SEQ ID NO: 766:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 672 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60  
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120  
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAGA 180  
 TAAGCTTAGT GAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240  
 30 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300  
 TAAAATTGAA TATGTAGATG AAGTTAAAAT TGAATTTATG ATAGATGCAT ATCAAAAGTC 360  
 AAGGGcTGAG CaATTAATTA AACAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420  
 35 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAAT 480  
 GACATTGGAA GATTTCGCAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540  
 40 TGTGTTGTAk TCTAATCAGA AAATTAAACG TATTGcAATT ATTGGTgGTT CAGGTATTGG 600  
 ATATGAaKAT CAAGCtGTCC AACAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660  
 GATGCCTAGA TG 672

## (2) INFORMATION FOR SEQ ID NO: 767:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GAAAAAGTTA AACCTACTGT AACTACAACA AGcMAAGTTG AAGACmATCa CTCTACTAAA 60  
 GTTGTmAGTA CTGaCACAAC AAAAGATCAA ACTAAAACaC AAAGTGCTCA TACAGTTAAA 120  
 5 ACAGCACAAA CTGCTCAAGA ACAAATAAA GTTCAAACAC CTGTTAAAGA TGTTGCAACA 180  
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240  
 10 GTTACAAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300  
 GGTTTAACTT CAGTTGATAA CTTTATTAGC AcAGTtGCcT TCGCAACACT TGCCCTTTTA 360  
 GGTTCATTAT CTTTATTACT TTTCAAAGg AAGaaTCTAA ATA 403

(2) INFORMATION FOR SEQ ID NO: 768:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTTTGCTTG CGTTAGTAAT TTCTAACATA TTCATTCACT TTTTGGAGCC 60  
 TAAACTATCA ATCACCCTC AAATCATCAT CGTTTTGATT TTAATTGAAG CACTAATTGG 120  
 30 ACTGCGTTTC TTGAAAGCGT ACGATGTTAA GCGTGGCAAA GATAAAGAAA ATAAGAAAAA 180  
 TAGTAAGGAT TTCGTTAAAC TAAAATCAAT TTTAGTAGCA ATTTTATTTA CATCATTTGGC 240  
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300  
 35 TGATTTAATC GTTTGGAGCA TAGGTGGTAT TATATTTGGC CTCGTATGTT ACACAATGGA 360  
 AGATAAAAGA TAACGATAAG GAGCTGGCGA TTATAAAGCT AGCTCCTTTT TTAACCTaTA 420  
 TATGTAAAGA aCTaTCCTAA GGGkTTTTAA TCATATGTCA ATAATTTCTA TAATACATTA 480  
 40 TTA 483

(2) INFORMATION FOR SEQ ID NO: 769:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTTAAAGAAG 60



GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180  
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240  
 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300  
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360  
 nTAACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

(2) INFORMATION FOR SEQ ID NO: 770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTCAC ACGGGCAACA 60  
 ACTTCTCTAG GTkAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120  
 ACCCGATCAA ATTCATCATT TTTCGCCGTT AACATTAATA TAGGGACTAA ATTTTTATTT 180  
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTATG GTAGCATAAC ATCTAAAATA 240  
 ATTAAATCTG GCTGTTCAC TTTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300  
 ACAACTTCaT AACCAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360  
 GTCATCTACT wCCaAACTT TTTGCGACAT GGtATGCCTC CCTAACTtAk AATTATATTT 420  
 cATTATAACC GAACTATTTA TAAAAATAmC ATCCTACACA TTATCTTTAC ACATTTTTTA 480  
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCT TCTmTCATTT GCATGACTTA 540  
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTT TATCCCACTA CCTATGCATG 600  
 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTCGC TTTGTCTAAT GTGTAAGAAA 660  
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720  
 CATTTAAAAA GGCGAACCTA GCAATTAAAG 750

(2) INFORMATION FOR SEQ ID NO: 771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

	ATTTAATTAT TATTTTTCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTTGGTGC	60
	TGaGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT	120
5	GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG	180
	ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC	240
	ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC	300
10	ATCTTCATTG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTC	360
	GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT	420
15	AGAGTTGCCA CTTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA	480
	ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA	540
	TCGTCTTG TG CTCACAACCA TTATACAACA ATCATTTCTA AAACAACAGT CATATTACAA	600
20	TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG	660
	CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC	720
	TTcAACAAAT GGGAAATGCAC TTGATTCTTG ATATACTTCA AAGTCCGCAT TTTGGATTAA	780
25	ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTTCCTTCA CCGAATTCTC CTGCAATAAT	840
	TTTTGTGCGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC	900
	TTTAACTGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG	960
30	GAATCGATT C ATTTTTCTCG GACGATAATA CTTACGCTTA TTAAAAATT TAwCyTGtTT	1020
	TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA	1080
35	TTcACCTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG	1140
	TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACTTCTTC	1200
	AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG	1260
40	ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAACCT GAAATGATTT	1320
	TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA	1380
	TACGATAGGA TAGCCTTCAC CTAANGTACT GTAATGTATC GATGTTCCAT CTTTTCTAGT	1440
45	AAATAGATCC ATAATTTTCT CC	1462

(2) INFORMATION FOR SEQ ID NO: 772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 704 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

5 ATTATTATAA GGAGTTATCT TACATGTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60  
 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTtagAT CAATTmGGTG 120  
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180  
 10 AACCAATTAAA TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTTCAAAGC GATGAAGAGG 240  
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300  
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360  
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCTT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420  
 AAAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GCGGAATTCTG 480  
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAAGCGAG CTTAGAAGCA AATGTTAAAT 540  
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTCA GCTAGTCCAA 600  
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCATAC AATTCTTAAA AGAAATCGAA 660  
 GAGCGTGCAC CTTTTAAAC CGTAATGTTG ATCCAGTAGA AGTA 704  
 25

## (2) INFORMATION FOR SEQ ID NO: 773:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

35 GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCcTTTGa ATtGCATAGA 60  
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTA AAATATTCAA 120  
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTG TG TCATTTcAGG 180  
 TGTCATGACA TGCGCAAATT TCATTAAGAA AAATAACACA AACCCACCTA AAATATTTC 240  
 45 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300  
 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAACTAA 360  
 AATCAAACCT AAACATAACG CAATGGCTCC CATTAAATTG ATAAGTCCAT CTACGTGAGT 420  
 50 ACTCGCA 427

## (2) INFORMATION FOR SEQ ID NO: 774:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

	AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAACTAA AAAGATGTAG	60
10	ATATATTATT TATTCTTGGC GGTGATGGCA CGGTTAACGA ACTTATAAAC GGTGTTATGA	120
	CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA	180
	AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA	240
15	AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG	300
	CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAAGAT GTATTGGGTA	360
	AATGGAGTTA TATTGGGTCC ACCGTCCAAA ACnCGGCnAA	400

20

(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 484 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

	AATTATTCCT CAATAGGAGC ATTACCCGCT CTCTCACCAA TTCCCAAAAA TGTAGTTTCT	60
	ATTTGCTTTG CACCATTAA AATTGCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG	120
35	TTATGACAAT GAGCAGAAAA AATTATGTGA GAATATTTTT TTACAAAGTA ATTAATAATA	180
	TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCGG CAAATGTAAC TGTTCCTAACT	240
	TGATATTTTG AAATAATTTT CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCTA	300
40	TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTTCTTTA ATATATCCAA GCAGTCTTTG	360
	ATTTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTTATATG CAAGTCAGAT	420
45	ATTGGCAATA GTATTTtTAC CACTAAATTA TGAATTTtCA ATtTGACTAT TTTTgGTATG	480
	TCnT	484

(2) INFORMATION FOR SEQ ID NO: 776:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 788 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

5 CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG 60  
 AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT 120  
 AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTAA AAAAAGTGCT TGAAAGGTTT 180  
 10 CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT 240  
 GATTAGCTAG TAATTGTTGA TAGTTTCCCT TTTCAACTAT TTTACCATTT ATCATCACAA 300  
 TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG 360  
 15 CATGTGCTTC AATTAAATCC ATAACTTTTA AACTATTTTG TTTATCTAAT GCAGTTGTTG 420  
 GTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC 480  
 GCTGAATTTT TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTGACGT tCTAGTGCCA 540  
 20 AATGTTCTAA ATCTAATTGC TTAAATATTG CTTGCACCGC TTCATCTTTT TCATCGGTAA 600  
 ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG 660  
 ATTCAAACCTT ATCTTTGTcA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC 720  
 25 CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTTT CCTGAACCAG 780  
 AAGGACCC 788

## (2) INFORMATION FOR SEQ ID NO: 777:

- 30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

40 TTACAAAAGA AATGCAACAA AATTTTTGAA TCATTACATT TTTTATAAA AATTTCACTT 60  
 TAGATTCACA ATAATTACTT ATTTTGTCAA TTTATTAAAT GTCAATATGT TGATTAATTA 120  
 ATAGTGTGTG CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA 180  
 45 TTTGAGTTG AAATTTATCT TATTATTTTT CCACTTTTAC GTGCTATCCC ATTACACAAA 240  
 AACAAATAAG TAAAGATATT AAGTACAAA AAGTGAACA CTTGTAGAT GCTCCACCTC 300  
 AATTATATTA AGTTATATTA TTTTGCTGCT TGGTATAATT CATCAACTTT TTTCCAGTTA 360  
 50 ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATTT CAGATAGTAG 420  
 GCATGCTCCC AAACATCAAA TAGTAAGATT GGTGTTTTGC CTTCTGTAA TGGATTATCT 480

GATCCAAATA ATGTTGTTGC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC 600  
 CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTTCTT CAGAATTAGG TGATAGTATT 660  
 5 TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC 720  
 GCTTCCGGTA CCTTGTCTAA GTnAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT 780  
 GTTCCTTCAA CTGTTGCGTT TAATTTTCGTC ACGTACGTAT TGTGATGTTT GTCGTGATGA 840  
 10 AACTCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT 900  
 GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTATGAA TATACTTTTA TAATAATTA 960  
 TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTTGTTAT ATCCAATTAT ATAAAATTTA 1020  
 AATATTCGAA ATTGATATAA TATTTAATAT TGAATGCAAA AAGGCATTTA ACTGCTTTTG 1080  
 TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTCAATAA GAAATTGCCT 1140  
 20 TTTCT 1145

(2) INFORMATION FOR SEQ ID NO: 778:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 902 base pairs  
 25 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

AAAAGAGGnC CAATATTATC AATATACGGC CGGAAGATTC CCTTTTTCTT CTCCACTTAC 60  
 TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA 120  
 35 ATTGTGGTAT CAAAGCTATT CGCTTTTTCT CCAATAATGT CTTTACCATA TTTATTGAAT 180  
 GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA 240  
 AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTW TCTAAATGGA 300  
 40 GTTCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG 360  
 TACACATATA CAGGTATCTG TCCGTCTACA TAGTAACTAT GTACGAAACT AATTACTGCA 420  
 AAATGCCATA AATATAAACT ATAAGACCTT TTCCCGATAA ATACTAACAC TGGATTTGAA 480  
 AATATCTTCG CtATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT 540  
 ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA 600  
 50 AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA 660  
 ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC 720

ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840  
 CCTATTTTGT ATCGCTTTTT AATTGTTAAC AATAATGTAA CCAAATAAC TGGGAAAAAT 900  
 5 AT 902

## (2) INFORMATION FOR SEQ ID NO: 779:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60  
 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTTCGATTGC TTCATTTACT 120  
 ACTTCCAACG TACAGTCTAA TGCTGTAAA ACACCAGTAA CTTCAACATC TTCATCACCT 180  
 ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240  
 AATGTCATTA AATCAGCTAT TTTCATaCTA TAACACCCTT TCAATTACaG CAATTTCGTC 300  
 aTTAATTTGa GCTAAAcGTT GakGAKGTTG TTCAGTawTG AGtTTCGaTT TAAcATGATA 360  
 AAgTGCyTct AACTCtCTTT GcCATTTtTT TATAAAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTTCTGTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTCAGT 60  
 TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTTCGTTT CATTTTTTAA ATGTAATGTG 120  
 TAAGTnGCTT TTTTTCATA TTTTAATTCA CGTTCCCCGA TACCTCTATC ATGCTTCAAT 180  
 ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAATTTTT 240  
 AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300  
 TCTGCTTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTTCGCA 360  
 TGAAC TAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCTTTT ACCACCATTT 420

CTATCATGCT TCAGTACTGA TTTTATTTGA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540  
 TTATnTGAAA ATGAAAG 557

(2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60  
 TATATTTTAT TGAAAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TG TAGAAACA 120  
 TCAAGCCCAG CTTGAAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180  
 TGTTCATACT GCTCCAAGTT ATCATTAAAT CTAAATTTAA TACTTACTTC ATTTTTAACT 240  
 GGAATAAAAT GTACATCACT CGCTTTCATT TCTATCGCTT TATTAATTAT TTCTTGAAAT 300  
 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360  
 ATTTAACCGT GTAAAAATGG ATTTAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420  
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

(2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60  
 GAAGACGGTG ATTTCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120  
 CATGATTCAG CGTTACACAT CTTTGGTTTA TTGTCTGACG GTGGTG TACA CAGTCATTAC 180  
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240  
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAAATCCG CTTTGAAATA CATCGAAGAG 300  
 ACTGAAGCTA AATCCATGAA TnAGGGCATn GGCCATTTGC ACCGGGGCCT GGCCGTAATA 360  
 AGCCAAnGGA CCGGGCCAAC CGTTGGGACC GGGAAGAAAA 400



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 810 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

10	GATTAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC	60
	ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGTA	120
15	TAAAAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT	180
	ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTCG ATTTGAACAG	240
	GTTTTTTTTG AGGTGCAAAAT CGTTTAAACA CGTTACCyTC GCGATCCACT AAAAAGTTAG	300
20	TGAAATTCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA	360
	ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTTTG ATGCATAGGG AAGGTAACAC	420
	CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTCGCCTGA ACCAGGTTCT TGGCCACCAA	480
25	ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTTGATC TTTGTATTC TCGTATAATG	540
	ATTGCAAACC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA	600
30	TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA	660
	AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTTAC TTAAaATGTA CCACAAAATC	720
	GTGTAAtAGT CTkTACTArA ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAGGA	780
35	GATGTATAAC ATGGnTCAGC AACAAATTCA	810

(2) INFORMATION FOR SEQ ID NO: 784:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 788 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

40	AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTAAACGAG CGTTGCAACA	60
50	TATCTCGAAT TGTAAGGAG CTTGAAAATG AATAAAATA TAGTCATTAA AAGCATGGCA	120
	GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA	180
55	CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTTCCATAT	240

	ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGGCGATA GAATTACTGC CCATCCAAAC	360
	GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT	420
5	GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT	480
	AATTTTAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA	540
10	ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAAATAGTT TTAAACAGTT TGAATCTACA	600
	GGAAGTATAA AAAGAATsAA AGACAATATT TTAAATTTTG GATGCCATAC ATTGGAACCC	660
	GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTCATAGGT GTGGTGGTAT	720
15	GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC	780
	CTCCAnAT	788

## (2) INFORMATION FOR SEQ ID NO: 785:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1023 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

30	CAATATTTTA GAAACAaTAA TTAAGTTGCG ATGAACAAAC TATTAACAAT AATCTTGAGT	60
	ATTATATTTA TCTTAATTAA TAATATATTT ATTTAAGATT ATGTTACTTC CAACTTTCAA	120
	AGTAGAAAAA CGGTATAAAT TGGTTGATGGG TGTTTATTGA TAACTGCAA AAAATACAGC	180
35	CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA	240
	ACTTAGTGCC AATTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA	300
	GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTGA TATTTAATGA	360
40	TGGTTTCCCA ATTTTATAAC CATTTGATTG TGAAAATGAG AAATAkTTCT TCACACCTTT	420
	AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG	480
45	ATGTGTTGCT GTTGTGTTAT TTTGGAAACT TGGTACATGC ATACGATGTG AATTGTGACC	540
	ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAATTTT	600
	AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG	660
50	ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC	720
	AATAAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA	780
55	TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTTGCGTA GTAATGAAGT GGTGGTTTAC	840

TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960  
 TGGCACAATG TTTCTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020  
 5 AGC 1023

## (2) INFORMATION FOR SEQ ID NO: 786:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60  
 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTAAATA 120  
 TTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180  
 TATTTAGGTG TGTCAATAGT AACGTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240  
 TCTGGCGTTA ACCATTTTCAT TTCAGTATAT TTAAACAATG AACCATCCTT AAACCTCTCTT 300  
 GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTTAGC TTTATTATAG 360  
 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGcTG AACCTTCATT CACTAAGATG 420  
 GATATATCCA TGTCTTTCGC TTCTTTTAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480  
 TTACCTT 487

## (2) INFORMATION FOR SEQ ID NO: 787:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 803 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60  
 TTAAATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120  
 AAACATAGAA TAGTACAGTA ACACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180  
 TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAAATCCTG 240  
 CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAAACATT AAAGAAAATG 300

TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA 420  
 TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAAATAT 480  
 5 CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA 540  
 TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG 600  
 TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT 660  
 10 TAATTCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT 720  
 AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT 780  
 15 TCTATGaCGA ATGATTACAC TTG 803

## (2) INFORMATION FOR SEQ ID NO: 788:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT 60  
 ATTAGTGACT TTTCAAAAAT TGATTAAAGA CTAAAGGAGT TTAAGATGAT ACATCAAAAAT 120  
 30 ACGATTTACA CAGCGGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT 180  
 TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA 240  
 35 TCGTATGAGA CACCAGCAAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC 300  
 AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT 360  
 TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTCAATA 400

## (2) INFORMATION FOR SEQ ID NO: 789:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 762 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

GTTTAAAGAT GGAGAGATTA TTGATTTTTC AGCTGGAAAA GGTGAAGCGG TATTGAAAGA 60  
 TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA 120

ATGTCATTTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240  
 TGTGAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTCATGAT 300  
 5 TGGTAGTAGT GATTGACTA TTTATGGCAT ATTCGAAGAT GGTTCAAAAG AACTAGTATT 360  
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420  
 10 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480  
 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540  
 CAAGTTTTCC CTCAAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600  
 15 AATATTGATG AAATTGCAGC AATCACAGCT ATGAAACATG CTGGTGCACA AGTAGTTACC 660  
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720  
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

(2) INFORMATION FOR SEQ ID NO: 790:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCTTTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60  
 TATTCGTCA CATTGATTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120  
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180  
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATT TAATTAAAGC 240  
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACTTT CTTTTAAAC TGTTTGACAG 300  
 40 ACCAACTGT TCTATATAAC GtATCTtAT TTGTnCTTT TCTTCTTAC TTATTTTTTT 360  
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

(2) INFORMATION FOR SEQ ID NO: 791:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

	AACGTAAAGC GGAAGTTGGG ATGGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT	120
	ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTTnGAA ATTGGAATTG	180
5	GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTCAGCG TTGACACGTA AAAATGAAAA	240
	TGCCCTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC	300
10	CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC	360
	ACATGGGGGC AGAGTnACTT ATGGACCGTT GAATGnGATA	400

## (2) INFORMATION FOR SEQ ID NO: 792:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 678 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

	GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATACA	60
25	AtTTAATTGG CAACTTTTTG TCACCTTCAT AAACCTCAAA TTTTCTCCAA AATTGACCTG	120
	ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA	180
30	CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA	240
	TTGGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT	300
	CTCTAAGTTC CTGATTCAAA ATAGGATATG TATTGTTAgT GGCyTTTGCT GCTGGTTTAA	360
35	CTTCTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG	420
	AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT	480
	CTGGAGCTTT TTCAGATGTT GTTGTTGGAC TTGCAACTGC TTCAGTTTTT GGTGTGCTT	540
40	CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTTGTGT TCGCCATTG ACATTAATAA	600
	TAAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA	660
45	TGATTTAAAT TCTTTTTG	678

## (2) INFORMATION FOR SEQ ID NO: 793:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60  
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120  
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180  
 TGTCAGTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240  
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300  
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGGTCCTT GGAACCACTT C 351

## (2) INFORMATION FOR SEQ ID NO: 794:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTCCG GTCTTGCTGC 60  
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAAACAACA 120  
 .CATGTTGAGA CAGTGGCATT ATTCAATTTG AAATAGCGCA CATGATTTGA GATAAAATTT 180  
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTTACTTT 240  
 CTTGATATGA ACTTTTAA TAAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300  
 AATGTCATGA TCGGGAGGGT TGGAATGCA TAAATTGAT TTAACGACAA ATAATTTTCA 360  
 35 AATGCGAGGT TTATTATCCT GGCAACCTGG TTATTGCGTT 400

## (2) INFORMATION FOR SEQ ID NO: 795:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGTCATAATG AGTTTTATAA 60  
 50 TTGTATTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120  
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAGATA 180  
 TTAATGGTTC TAAAAGTTGG ATAACTTAG GATTTATGAA CTTACAGGCA TCTGAGTTAT 240  
 55

TAAGTAAACC AAAATTAATt TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360  
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1053 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTTGTTGGAT ACTTAGAGTT ATTGTTCCGGG CCTTTACGTC 60  
 GTTTAGTCGC ATCATTTACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGTATTCC 120  
 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGG TGCTCAACCT ATTGAAATTA 180  
 AACAAAGGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240  
 TTTTAAAAGA TATTAAATTTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300  
 GTGGTGGTGG TAAATCAACA TTAATTAAct TAATACCGAG ATTTTACGAT GTAActTCTG 360  
 GGCAAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTTT AACGGGAAGT TTAAGAAATC 420  
 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAATATTT 480  
 TaCTTGGTCg TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540  
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600  
 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660  
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720  
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780  
 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840  
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTc 900  
 AAAACTTATA AAGTATTAGT TGTTTGACTT CAGTACAATC TTGAAGAGAA AATTTGTAAC 960  
 AGGATGGTGG GGTcATAACA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAAATAATC 1020  
 TTnCTGCTTT TTTAAATTTA ATTTcGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGACT CCTGAAGTGA AAGAAGGGGA CCGTGTCGTG TTCCAACAAT ATGCTGGTAC 60  
 AGAAGTTAAA CGAGATAATG AAACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120  
 TATTGAATAA TACAGAACTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180  
 10 CTAAACAAAT GGAGGTTTAT CATTTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240  
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAAATGCA GTTAAAGTAA CGATTGGTCC 300  
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360  
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420  
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480  
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540  
 20 AGTT 544

## (2) INFORMATION FOR SEQ ID NO: 798:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60  
 35 GGTCAGCGAA TTAAACACCT AATTTCGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120  
 ACATAATCAG CTTCGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTAACTCCG 180  
 TTATCTGTTT CTTAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTC AAC ACCTTTTTTCT 240  
 40 TTCATACCTT TTTTAACAGG TTGTGTGCAT TTGnTTTTTC GAGGCCACCT AAGATATCTT 300  
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360  
 45 nCTGGTCCAA TG 372

## (2) INFORMATION FOR SEQ ID NO: 799:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 1182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5 AAACGACATT TGTTTAATTG GAAGAATTaG CACCATTTTT TGAGGCGGGT ATAGAtTCAT 60  
 TTAAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC 120  
 GTCAAGCGAT AGATTTGTAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT 180  
 10 TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTTCTTAT 240  
 ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC 300  
 TCCTAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAAACT TAGAAAAGTT 360  
 15 AAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTTA GGTGGTCAAG AATATGGATT 420  
 ACgTTCaAAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA 480  
 CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA 540  
 20 AGGTCTAGAA TCATATTTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC 600  
 AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAAGTTGAAA TTCATTTATC 660  
 TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAAGATAT TGGAAAGAAG AAGGATTGGA 720  
 25 TCGTGTGTA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT 780  
 AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG 840  
 TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GGCGGTTGCT GTCAAAGTTG 900  
 CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTTTATAA 960  
 TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTAAAATTAA TCGAATCAAT 1020  
 35 TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT 1080  
 TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA 1140  
 TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA 1182

## (2) INFORMATION FOR SEQ ID NO: 800:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG 60  
 TTTGGTTTGC TTTAAAATTC TCTaGTGCTT TGTCTTGGAT GTTTTCGtTG cAATCATCTG 120

TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT 240  
 GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCATAAAT CATTGTCCG 300  
 5 TTAATCACAG GTATTAAATC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTCATAG 360  
 CCTTGTTCaA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA 420  
 CGTTTATTTA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA 480  
 10 TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAGTTT TTTTGTTTTT 540  
 AAATAATATT CAATAGCGCG CAACACTCTT TGGcGGTTGT TAGGGTGAAT ATTTTCTGaC 600  
 15 AGAAACCGaC ATCAAATTGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA 660  
 ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTtT CATCTTCTAA 720  
 TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC 780  
 20 TTTACCTCTA TTCGtTATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTcATATGC 840  
 TGAAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTC 900  
 TTCAGGTGTh ACTTTTGCAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC 960  
 25 GCTTATGATT TCACCATTGA TACGCTTCG 989

## (2) INFORMATION FOR SEQ ID NO: 801:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG 60  
 40 AAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGGTC AAATATTCAT 120  
 TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTAC AATTAAAACC AACTCCGCTT 180  
 ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTTATGGC AATTTATGAT ACAGATGCTA 240  
 45 AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC 300  
 AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG 360  
 ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC 420  
 50 AAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAATAATC 480  
 AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA 540

## (2) INFORMATION FOR SEQ ID NO: 802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

	GCGAATTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA	60
15	GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG	120
	CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG	180
	GTAAACGTCC ATCTGAAGAA GAACTTCAAG ATTTGAAAGA TAGATATGAA TTTATAGGTG	240
20	GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TCGCTAGTT TCAGCATTA	300
	ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAAACAC ATTTCCACCAT	360
	TTATCGAAGA TCGGGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG	420
25	TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG	480
	AAGCTGCAAA ATATGGTATT CAACTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT	540
	TTATTGAATA TTGGACGAAT AAAGTCAACG AAACATTAGC TCAAATACCG GAAGAGGAAC	600
30	ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA	660
	ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTTAATTAAA GAACAATCTA	720
35	ATATTGAACA TATCGCGATT GGTGGAAT CTGAAGGTAA TACAGGTACA CCTTGGTAG	780
	GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAATTTA	840
	TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG	900
40	AATGTAAAGT AGTTTTCGAT GATATTGGTG CGAATTATTA TCGTCCAAA ATGCCGAATA	960
	CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA	1020
45	AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT	1080
	ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG	1139

## (2) INFORMATION FOR SEQ ID NO: 803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

5 TATCCnAAAT AnAAATGTGC GCATTTATCA AAACCTTACA TACAATAGAG TTTTCCCTAA 60  
 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120  
 TTTTGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180  
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240  
 ATATAAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300  
 TAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGAYT CTGCAGGTGC 360  
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420  
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480  
 TAATATGCAA ACAGTTAGAG AAACTGAGTT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540  
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600  
 ACAATCGACA AAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660  
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720  
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780  
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840  
 TATTCAAACCT GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900  
 30 TTTAAACTAA TGATAAACAG TAGTAATTTA TTAAGTTAAG AACATTTAAG ATTTTCAAAT 960  
 TAAAAACGAG AATTTAAAAC ATGTGGTGC 989

## (2) INFORMATION FOR SEQ ID NO: 804:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 711 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAAnCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60  
 ACTACGTTAT TAAGCTGCTT TTTGTACAC TTTATAACCA ATAGCTTAAG ATTTAAACT 120  
 50 AATCGGAAAG AACAATGATT CACCAAnAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180  
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240  
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTAAGT ACAGGTGTGT TTACAGCAGA AAGTCAAAGT 420  
 GGTACGCGA AAGTAGAAGT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480  
 5 CAATACTATT CTGAAGAAAG TTTTGAACCA ACAAACATTA GTGTTAAAAG TGAAGATTAC 540  
 TATGGCTCTA ACGTTTTTAAA CTTTAAACAA CGAAATAAAG CTTTTAAAGT ATTTTTACTT 600  
 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660  
 10 GAATTAATAG ATATAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

## (2) INFORMATION FOR SEQ ID NO: 805:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTTCAAGC TCAAAATAAT ACTAATGAAA 60  
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATACTTCTA 120  
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180  
 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAGT 240  
 30 ATGACTTAAA TGGTCGCAA ATTGTTTATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300  
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360  
 GTGCTGAGGA AGAAAGTACA GAAGCTAAAG CTACATATAC AACACCGCGA TATGAAAAAG 420  
 35 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTTTATCG 480  
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAAA GTTAAAGTTG 540  
 40 CTCTATCTAT TAATaATAAA TTWATTAACT TTGAGaCAAA TGCTAtGGTG GtCCaAATaA 600  
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660  
 TAATTTTGAC TTCCAAACGA 680

## (2) INFORMATION FOR SEQ ID NO: 806:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA 60  
 TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG 120  
 5 GAGAATAACC GAATTTGTGA TGTTATTTCC ATTTTAAATA TTTGCAATTG TATTAAATGC 180  
 TGCACTTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATTCTTG TTCTAGTTAT 240  
 TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTTCG TGGTAAAGTA CTTCAAGAAA 300  
 10 AAGAAAATGA ATACTTTTTG GCAGCAAAT CAATTGGTAC ACCCACATAT AAAATTATTT 360  
 TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG 420  
 CCGGTATGAT TGTAGTGGAA TCAGGrTTGA GCTTTTTAGG ATTCGGAATT AGTAAAGCAA 480  
 15 TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC 540  
 CGTGGATATG GATGCCACCT GCTATAATGA TTACATTAAC TATATTAAGT ATAAACTTTG 600  
 TAGGGGAAGG GATTAAAGAT GCTTTTAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG 660  
 20 CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT 720  
 CCATTTTTTT GACAGTTTTA AATGAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA 780  
 25 TATCaYCAAG TTTATcTGAG TTATAGAAAC TTTCGTATTT TTCTTGGAAT TCTACTAAAA 840  
 ATGCTTTAAC TATTTcAGCA AGGTCACCTT TAAATTTACC ATAACCTTCG CCCTCATATT 900  
 TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA 950

(2) INFORMATION FOR SEQ ID NO: 807:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

40 GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC 60  
 TTTAATAAAT ATAAATACAC ATAATACTT ATATACTTAA TTAAGATAGC ATAGTTTCAT 120  
 45 TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT 180  
 TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA 240  
 AATTTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTcATGA 300  
 50 GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTAA gCgTAAGtCa TTCTGATAAG 360  
 TTGTACCATT GATATTTTAT GAAATAnTCn ATGAACTTAA AGCGTTTATG CTACACTA 418

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 842 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

10	AATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTTC CTAATAAAAAC CTTGATTTTCm	60
	AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAAATGw CGCAATATAA TAATAAGTAC	120
15	AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA	180
	TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA	240
	GACGTGAAGC GATGGGATAT TTAaMAAGGT TTGCATTGTA CATAAGCGTT ATGAyTTTAA	300
20	TATTTGCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC	360
	AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT	420
	TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA	480
25	CGATATATAC AGATTTCGCC AAAAGTAATA AACAAGGTGG ATTGAGTAAT GAAGGTATGG	540
	TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT	600
	ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAAATGAAA AATAATAAAA	660
30	TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAAA GAGAATAGAA AACTTTAAAT	720
	TTTTTGGA CAATATGCAAAC CTTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA	780
	TTAATGAGAA TGTTC CAAGT TATGACGCAA AATTTAAAAT GAGCAATAAA GATGAAAATG	840
35	TT	842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

40	TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GSTATATGCAA	60
50	GCAATGATTTT GCCATAActT TACctCtTTC TATATTAAAG TACCACTTTT ATCATTCCCT	120
	ATAATATTTA ACTTATTTAA TTAAACGTAA ATTTAACACA ATACGAATAC CAAATCAAAA	180



AAAAATAGAT GTAGTCAGTT TAATTAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300  
 TTTTCAAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360  
 5 ATATATTTCAT TTTC AATTTA TAAATAAACA CTTAATTAAA TCACATTCTA CTTTTGAGAT 420  
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

## (2) INFORMATION FOR SEQ ID NO: 810:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

ACATTTTGTG CTGTGTGTC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60  
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120  
 TTCAACACAC TGTTTTTCAT CATTnCCATT TTAGGTGAAA TACGACTAAC TGCTTGTTGC 180  
 25 ATTGTCTTTT GCAATCCTGT TTTAACTGCA AATTTTCTC CGCCTTTGAA GCCTAATTTT 240  
 ATTAACTTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300  
 CCTTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCCTGTG 360  
 30 GCTGCATTTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTACTGCTCC AGCAACAGGA 420  
 TTAATACAAG ATAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480  
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540  
 35 TGAGTCATCA TTTTTTCAAA ATCACTTTTA GATAATTTCT TATCTTCTTT TTTCAATTTCT 600  
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660  
 CTATAACAT CGCTGTCACT TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720  
 40 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTCT 780  
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGTCAAT AATTTCTTTT 840  
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCaT TTTGATAATA CCCCATTAAT 900  
 TTAGATCCTT GTGGAcCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960  
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGATATCTA CATCTAAGAA GTCTTGACCC 1020  
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGTcATAATC AGCTGTTAGA 1080  
 TATTCAATAT CTTTTGTCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260  
 CCATTTTCCA TAGAATGTGC AGCTTTTTCA CTACTGTAGT AATTAAATTG CGCTATTTTT 1320  
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGACTTATGC TTTCCAATTC TTTTACAACA 1380  
 TGTGCAATCG TTTCAGCTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440  
 TATtAATATG ATTTTcATCA GTATCGAATC CAAATAATTC TCGTGATAAA nGTATTGAA 1499

10 (2) INFORMATION FOR SEQ ID NO: 811:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 620 base pairs

(B) TYPE: nucleic acid

15 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAGATG CAGGATCTAA ACCACCTGAT 60  
 AATGTACGAC CACTTGGTGG AATAACyAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120  
 25 TCCATTAAAA TAATGACATC TTCCCCAATT TCTACTAAAC GCTTTGCACG TTCAAGTAAT 180  
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTCGTCAA ACGTTGAATG AACGACTTCA 240  
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300  
 30 ATAAATAGCT TTGCATCTGG TTTGTTCGTA CTGATTGCAT TCGCTATTTT TTTTAATAAC 360  
 GATGTTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420  
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480  
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTTCTTCAC TTCTTCTGCG 540  
 TTATGGTCAT GACAAAGTCA ACTTGTAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600  
 TTCTAACTTT CCCAGTTACT 620

40 (2) INFORMATION FOR SEQ ID NO: 812:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1094 base pairs

45 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

TGAACTATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180  
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240  
 5 AAAAGCATT C TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300  
 CGAAaCTGt GCACATTTAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360  
 10 TTA CTGGGT CTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420  
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAACTTGA 480  
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540  
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600  
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATTTTC 660  
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGCtATTGc 720  
 20 GtTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780  
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840  
 AACATGGTCA AAAAaCTTAG ATATTAAAA TAGATCTTAT GCGCTTGGAC AATTTGAAGA 900  
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAATT AAAnGTTATC TATCAGCATC 960  
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAAGTTT ATATCGAACT 1020  
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080  
 ACTATGGTAT TAGC 1094

## (2) INFORMATION FOR SEQ ID NO: 813:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 930 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTTACC CCAATCGTAA ATATGATGGA 60  
 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120  
 ATTACGTAA TTGTTAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180  
 50 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240  
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300  
 ATACCATCTA TGTTAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480  
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTCAG TTGGTTCATA CATTCAAGGA 540  
 5 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTATTTC GGTTATCGGG 600  
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTGTG ACCATATTTA 660  
 10 GGGCCTACTA TAGCGATTTT TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720  
 CTCTTAAAT TAGCAGTAGT ATGGACTTTA GTACAAATTG TTGAAGGGCA CTTCAATTCA 780  
 CCAAATATCA TGGGTAAAC ACTTAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840  
 15 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTAG GTATTCCGGG ATATGCTATT 900  
 TTAAAAGTAT TtAGTTACTC ATTTATTCCA 930

## (2) INFORMATION FOR SEQ ID NO: 814:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGGCAA ATCTTATGAC TATATGCTTG 60  
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120  
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180  
 35 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240  
 TTTTCCAACA TGAAATTGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300  
 ATCACCCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360  
 40 AAgCTTAGGA TAAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420  
 TAATATATCA CCTTCTAACC AAACTTTTAA TCCCTCATTA A 461

## (2) INFORMATION FOR SEQ ID NO: 815:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 573 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

	AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA	120
	TACATTTTAC ATAAAATGAA GAATTTTAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG	180
5	TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TCGCTAGTT	240
	CTTCTTTTA ATCATGAAGT AGATACTTTT TCTATTATTG AACAAGCCTT AATGGATCAT	300
10	AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA	360
	TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAGGT	420
	GAAACAACGA ATAACCTAGA TTTAATTGTT GTTCCTGGTG TTGGATTTCA AGACGATGGA	480
15	TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG	540
	ACAATAAGCT TATTATACGA TTTTCAAATA ACA	573

## (2) INFORMATION FOR SEQ ID NO: 816:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

30	TAGTTTAACA ATGTCTATTC TCATAGAATT TGTCCAATA AATGTAGACG ATTCACTAAA	60
	CTTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT	120
	CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG	180
35	TAATAGTCCT TTTTACGTT CTTTAAATAA CTCAATTCTA TTCATTGAT TATTCATTTT	240
	ATTGTCTATA GATTTTAACA ATGCACTTAC TTTATCYTGT TCAGTGAGAC AAGGTATTTT	300
	AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA	360
40	TGCTCGTAGT TCTTTAAAT TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT	420
	TTTAACTACA TGCGCATGAT TATTTACCCA GTATTGCCCA TTAGCAATAA AGCTACTCGT	480
45	CTCAAAGTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA	540
	TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT	600
	TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATTT TCAAAGATAA AGATGTCTTT	660
50	TATGAATTTG TTTTCCCACT CTGGATATTC TTCACCATTTC TCATCTTTGA ATCGCAATTC	720
	TTGTGTGAAG ATTTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG	780
55	TTCTTCTAAT TCAATTGTC GGTGAGTTT GCTGAAGAAC TTGCCTATTT TTTGCTGTTT	840

	TCGACTACCT CCACTTTGTG CAAGGAAAAT TTTCTTTTA CCTTTTCTTG ATAATAGATA	960
	CTGTCCAAAA AAATTATAAT AATACTCTTT TTTCAATCTA ATAATACATA CATGTTGATT	1020
5	TAAATTAGCA TGC GTTTCAA CTATCGAATT AATGGCTGTT CTACCTATTG ATGCTCCTGT	1080
	AATATTTAAA AGAACATCAC CATAGTACGT TCTACTATTT TTCATCTCAT CATCTATATC	1140
	TTTACTAATA TAAACTAAGT CATTAGATT TAATTTACCA TTTCTAATAT TTTGACTCCT	1200
10	TAAAAATGGT ATGCCTTTGT TTGTATAGTT TTTCACTTCCA CCTTTGGGAG TCTTTCCACT	1260
	ACCTATTTTG GTAGTAAGAT TCCCTAACTT CTTCTCTTCC CATTCGCCTT CAAATCCTGG	1320
15	GAATCTCAAC TCTGGCACAT TTTTCGTTTG TGTATTACTC ATCTTTCAAC ACCCCAAGTT	1380
	CTTTCAGGTA TGCATTGATT TCTTGTTCOA TTTCTGCGAT TTTCTTGTCG ATATTTTTCOA	1440
	AATCTTGTTG GACTTGATCT AAATCAATTG GTGCTTCTTC TTCGAATGTA TCAACATATC	1500
20	GCGGTATGTT TAAGTTGTAA TCGTTATCGG CGATCTCTTG TAATGTCGCG CTGTAGCTAT	1560
	ATTTATCAAT CGTTGCTTTA CGCTTATATG TGTCTATAAT ACGTTGCGACT TGGGCATCGC	1620
	TTAAATGGTT TTGATTTTTT CCTTTTTCOA AATCATTTGA TGCATCGATA AATAGTACGT	1680
25	TGTCGTCTTG TTGGCGACAT TTTTAAATA CTAAAATACA TGTGGAATA CTTGTCCCAT	1740
	AGAAAATATT GGCTGGTAAC CCAATCACGG CTTCTAAGTA GTTCTTTTCT TCTATTAAAT	1800
	AGCGACGAAT CACACCTTCT GCGGCACCAC GGAATAATAC ACCATGTGGG aGTACGACTG	1860
30	CCATGGTACC TTCATCGTCT AGGTAATGTA CCATGTGTTG AATAAAGGCA AAGTCTGCTT	1920
	TGGaTTTTGG CGCAAgCTTG CCGTAACCAC TGAATCGTTC ATCATTTTCA AATTTTGAAT	1980
35	CTGCTGTCCA TTTTCGACTG TATGGTGGGT TCGCAATAAC CGCATCAAAT GTATTGCCTA	2040
	AAAAGGCTGG ATTTTCCAAT GTGTCATCAT TACGGATCTC GAAGTTCTCA TAACGCACAT	2100
	CATGTAATAA CATATTCATG CGTGCTAAGT TGTATGTAGT ATTGTTACGT TCTTGTCCGA	2160
40	AATAACGATA CACTTGCGTT TCTTTACCAA CACGTAACAA CAATGAACCG GAACCACATG	2220
	TTGGGTCGTA CACGTGACGT AATTTATCTT TACCGTCTGT GACAATCTTC GCCAGTATCT	2280
	TAGATACTTG TTGTGGTGTA TAGAACTCGC CTGCTTTTTT ACCCGcTGTC GCCGCAAAGC	2340
45	GCCCGATTAG GAATTCATAT GCATCACCTA ACATATCAAT TTCCATGTCA CTGTGAACGA	2400
	ATGGTAAGTC GTCAAGATTA ACCATGACTT TAGAGATTAA AGCAGTACGT TCTTTGACAT	2460
50	TGTTACCTAG TCGCGTTGAA CTCAAATCCA TATCGCTGAA CAGCCCGATA AAGTCATTTT	2520
	CACTTTCTTC ACCTAATGTA GATGTTTCAA CTTTGCGAAT CGCCGTCGCT AGATGTTCTA	2580
	TATCGAAATC TTGCGTTTCA ATTTACGAA TCATCGCACT GAATAAATCT TGTGGCTCAA	2640

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CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTTCGG 2760  
 CTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACCTCG 2820  
 5 CATCCATGTT CCCTCTTAAA TCATTGCGAA TCGACCATAA TTTTTTATGT AATTCAGCTT 2880  
 GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCCCT CCGCCTTTGC ATAAGTAATT 2940  
 TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTTG 3000  
 10 GATGTTGGTG GTGGAAATTT TGAGTTTTAG TGGCGCAATT GTTATTGAAA AATTTTATAG 3060  
 AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTTATAT TCTTAATGAT GTCAAAAAGT 3120  
 TGTTCATTCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA 3180  
 15 TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAT AAATGTTAGT TATAGTATAT 3240  
 TTTGTCAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA 3300  
 20 TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTTAC CTGATGGCTT 3360  
 ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTTAATATAG GTGAACCAGA 3420  
 GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCACTG ATAATACTTT 3480  
 25 ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA 3540  
 TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA 3600  
 TTTTCTACCT TTTGGTTGTG TTGATTTTTT TCAACTTGT ACAACCGCAA TATCTTCTTT 3660  
 30 ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC 3720  
 ATTAGGATGT GCTTTGATTT CATCACCAGC TTTTCATGTGA TAGGTAACAT GTTTATTGGT 3780  
 AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCAGCG CCCATCCATG TAACACCACT 3840  
 35 GTATGGTGCA ACATTTGTAT TTGTAATTTG TTTAACAGTA TTTTCGGCTT TGGCTGTTTG 3900  
 TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC 3960  
 40 TGCAATACTT TTGATGATTA TATTTTAT 3989

## (2) INFORMATION FOR SEQ ID NO: 817:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGCTCTAG TTGTTGCAAT GTCTGCGATT 60

TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC 180  
 CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT 240  
 5 CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTTCAATTA GAACTAATGT 300  
 GCTTTGATGG ATTTTAAATA AAAAACTGGA GTAGTTTAA GTGTCTATCA AGCATTAAAC 360  
 ATGTACCTCC TTTCTAAATT TTTCGTGTAA GCGTTTAA GGGTGTATTA ATATTATTAA 420  
 10 ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTATATG ATTTTAACAG 480  
 AGTGCGAATT ATGCAAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC 540  
 TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTTGTGGACG TATCAGGCAA ATGATTAATT 600  
 15 TTTAGGTGAT TGTGCTGAG GTGTTTGTGTT AGAAGGCGTA TTGGTATTAT TTGATTTATT 660  
 AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTTT GTTGACGATT GACTGCCACC 720  
 20 ACCGTGAGTA TTATTTTAT TTGAATTTGA GTCTTTTGGC TGAGCTGGTT GCGTATTCGA 780  
 TGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCATTAGT 840  
 AACGTTATTG CCATTATTTT GATTtTTATC TGTTTTGTCT GCACTATCAT CTTGTTGATC 900  
 25 ATTT 904

## (2) INFORMATION FOR SEQ ID NO: 818:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

TTAAACAtGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA 60  
 40 TTAAGGTTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT 120  
 CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTTACCAAC AATGTGATTG ATCTGACCAA 180  
 GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTTTGTGTT TTAACTTTT AAAGAATAGT 240  
 45 TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT 300  
 TGTATTTTAA AAAATTCTTT CACATTATGT ATAGAWGTTA TAAATTAGTA TATCaCACTA 360  
 TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTACA ATATTCTGAA ATTTATGTTC 420  
 50 GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAAATG 480  
 TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG 540



GACGGGACGT TTTTAGATT CAAAAAGACA TATGATAAAC TTAGATTGA AGCGATTTT 660  
 ACTGAACTTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG 720  
 5 TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT 780  
 TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT 840  
 GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC 900  
 10 GCGTATATTT TAAAACATAC TTCTGAAGCG TTTAAAGAAG ATACGAGATT TTATTATCAT 960  
 CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAAATAGCA 1020  
 15 TTTAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC 1080  
 AATGATATTA AACTTGTCTC AAGT 1104

## (2) INFORMATION FOR SEQ ID NO: 819:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1425 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

CCChTTTTAC GGATTAAnGG CTTTTTCCTA TTTAAACCT ACGGCATTTT CTTTCAACC 60  
 30 ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAATGGGG ATTGGAAATG 120  
 GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCTTTAG TGCTGACGAA TAAATATGAT 180  
 35 CTAACCTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTACTTA 240  
 AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT 300  
 ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG 360  
 40 ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAAA 420  
 CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTTAACG 480  
 CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC 540  
 45 GTCTTTAAAT GATTCCACAA CTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCTG 600  
 AACGCCACCA CTTTGGTTGC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTTGA 660  
 50 TTGTTCTTGA ATATGTTCTT CATTATCAGT TGTTCATAT TCACTATCCA CCTCTGTTTT 720  
 TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTTCTTC 780  
 TTTCGATAAC GCTCGATACC AATCTTTCGC TTTTTCGCC GCAaTAGGAa CAaCaTCTTT 840

	TACTTCAAAT TCTTTCCATT TTTCGGGGTA ACCTTTCATT GTAAAGGGCA TTCCTTAAC	960
	CTCCAATATG TTATAATTCA TGTTATATAC CACCATAATT ATAAAATGAA ACATATTAAA	1020
5	CACAATTTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA	1080
	TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT	1140
10	TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT	1200
	ATTTAATTCG AAATGCTTAG CGATGTTTTTC AAATATTGCT AAATACTCGC CCATTAATTG	1260
	TCATTTTATT GTAAGTCTAT CTTCATTAGC CATGGCTCTA TTTAACATAA AGCTAATTTTC	1320
15	TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC	1380
	ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTTATTTAA TTTGC	1425

## (2) INFORMATION FOR SEQ ID NO: 820:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

30	nCGnCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA	60
	CAGATATTCA TTAATGACAC ACTCAATAGC AACCATnACA ATATTATGTT ACCTATTTAA	120
	ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC	180
35	TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA	240
	TAGAGGTGGC TATAATGTGT GGACTTAGAA GTATAACATT AGGTACaACA AATATAGAAC	300
	AGACaAAACa TTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAAAC	360
40	CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC	420
	CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT	480
	CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCCATTT ACAACAGTTA	540
45	AAGAATTAAA TGGCAATAAA TATTTTCAGTC TCGAAGATAA CAATGGTCAT ATTTTCTCAA	600
	TATATTCAAA CGAGAATAAT TATGGCGTTG GTTTAGGTAT GCCTTCTTyT GAGAGTGC	660
50	TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG	720
	ATATTACAGG TCAAATTTTA ACAAATATAT TCGGACTTGA AGTATTTGCA GAATACCAAC	780
	CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGAACGGGT GGTCTAGGTG	840

ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960  
 ATGAAGTGGA AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAaTTA 1020  
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080  
 AGGACAAAAT TTATGTTACA TGAAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140  
 GTCATTAATA CAGATGCAAA GAAAT 1165

(2) INFORMATION FOR SEQ ID NO: 821:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60  
 TGAACCTTGT CATCACGAAT ATTAAGTAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120  
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAAGATA TATGGATTGA ATTTGATGAG 180  
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240  
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300  
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360  
 CTAAACAAAT GAGGGTACAA CCnTTACGAn TnCCATTTC 400

(2) INFORMATION FOR SEQ ID NO: 822:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 760 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

TGATATAATA CTTTGTGAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60  
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTAAAAATGT ATTTAGAAAG 120  
 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180  
 50 GAATAATTAT GCTTGCATAC TACTAGATTT AATGTTGCCT GAAATGGATG GTATCCAGGT 240  
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420  
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTAAACATT TAGAAATAGA 480  
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTGACTC CTAAAGAGTA 540  
 CGAATTATTA ATATATTTAG CTAAACACC AAATAAGTA TTTGACCGTG AACAAATTATT 600  
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660  
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720  
 TGGGGCGTTG GGTATAAATT TGAGGTAAA TCTAATGATG 760

## (2) INFORMATION FOR SEQ ID NO: 823:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

25 CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACG CTTTGAATGG GGGCTAATTG 60  
 TTGATATTAC GCCACCAGAT TATGAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120  
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180  
 30 ATATTCTGTA ATTAGAAGGT GCATTAACAC GTTTACTTGC ATATTCACAA TTATTAGGAA 240  
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAAGA TATCATTCAA GCACCAAAAT 300  
 CTAAAAAGAT TACCATCCAA GATATtCAA AAATTGTAGG CCAGTACTAT aATGTTAGAA 360  
 35 TTGAAGATTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420  
 TGTcTTGTcY AGaGAGCTTA CAGATTTCTC ATTACCTAAA AATTG 465

## (2) INFORMATION FOR SEQ ID NO: 824:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

50 CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCAGC 60  
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCAGA CTGCCCGCAA ATCGACCGGT 120

GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240  
 CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300  
 5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCaNa GCGCACTATC GGTGG 355

(2) INFORMATION FOR SEQ ID NO: 825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1099 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACCTTGGC TTGTTGactG ACTTGTatAT GATGATGTGC TTTGTGAATC GGATTTCGCTC 60  
 20 GTGCTTGTAC TTGTTGAGTT TGAGGCACTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120  
 TGATTCATTG AGGCACTTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTACTC 180  
 GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240  
 25 TCGGATTTAC TTTCACTTGA TGATGTTGAG TCGGATTCAC TTTCACTTGT AGAACCACTT 300  
 AATGATGTGG ATGTACTAAT GGAATCAGAT TTA CTGTGAC TGATTGAATC ACTTGTGCGAC 360  
 ATTGATGTAC TTAATGAATC AGACTTACTA TCACTTGTGG AATCACTTAA TGATGTTGAC 420  
 30 AAACCTGTAG AGTCAGACAA ACTTGTACTC GTTGACATAC TCAGTGATGT TGAAACACTC 480  
 TCGCTCTTAA ACGTTGACGT TGATTCACTG ATACTTGTCTG ATGTTGAAAT GGACGTACTA 540  
 CCACTTGTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600  
 35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTC AGACGTACTT 660  
 TCACTTAATG ATTCACTTAA AAAGGCAGAT GCACTTTGTG ATTCTGAATC GCTAGTACTA 720  
 TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780  
 TCGCTCGTTG ACGTTGATTC ACTTATTGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840  
 TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTA CTGTGAC TTAACGATGT CGAAGTACTT 900  
 45 ACCGAACCAG ATGTGCTCGT AGAAGCACTT TgTGATATTG ATTCACTTGA TGCAGTTGAT 960  
 GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCaT TGAATCGGAT 1020  
 TGACTTGAC TCantGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080  
 50 GTCGACGTTG ATGTACTTG 1099

(2) INFORMATION FOR SEQ ID NO: 826:

(A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10 TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA 60  
 GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTTAAAACAA 120  
 GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA 180  
 15 AAAGCGATTG AnTTGTTGAA AAAAGTAGCT GATTCCGAnC CTACAATTGA AAGTGCTGCT 240  
 GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT 300  
 AAATTcNATA ATGCTGAAAA GTGTACCAGT TGGTATTG 338

20

## (2) INFORMATION FOR SEQ ID NO: 827:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 838 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30 GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT 60  
 TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGGCGCAT TTTGTGACT CTTTCTTTCT 120  
 35 AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC 180  
 CACGAAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA 240  
 ACGTCCACCA TTTTCATAGC AAAGTTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT 300  
 40 GTTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTT CAATTTATCC 360  
 CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT 420  
 TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC 480  
 45 AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT 540  
 AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC 600  
 50 ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTTG AAACATATTT 660  
 GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCAATC TTTTGTATGC 720  
 ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC 780

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## (2) INFORMATION FOR SEQ ID NO: 828:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCTC 60  
 TGAACtCTC CATAAATATA ATGGTGAATA AGTATTTGTA ATGCAATTAG TAGTTGTTTG 120  
 ACTTATTAAA TAAGCTTTTA TAATTAAATT TTTAAATCCA TCAGTCTTAT AACCATTTAA 180  
 TCGAACTCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG 240  
 CATTGCATGC ATTTAGCATA CCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAAATCT 300  
 CATATTATCC AATTGTGATA TAGTTATCAT AAAAAGTGAT AGGTGATTAA ATTGAACTTT 360  
 AATGATTTGG AAATTTTAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT 420  
 AAACCTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA 480  
 GGTGTAGTTT TGCTTTTTAG AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA 540  
 TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAATGAAA 600  
 AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA 660  
 GAAATTATGA TGTCGAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT 720  
 ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTCATAA AAaTTAACGA CTCAAATTAT 780  
 AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT 840  
 AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG 898

## (2) INFORMATION FOR SEQ ID NO: 829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

AGTAGGAGTC ATAAAATCGn ATTTCAAAAG CAATTAATGC AAAATACTGA GTCTACAGTG 60  
 CTATTTGCCA AAGCGTCcAT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA 120

AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA 240  
 AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA 300  
 5 AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA 360  
 AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCCTGC ATCTGATCAA AACTATAGAT 420  
 ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA 480  
 10 CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA 540  
 ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATTCCCCAG 600  
 ATGGAACACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTG 660  
 15 CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTTCGGTA 720  
 ATGATAAAGT CTTTAAAAAT GGTAAGGTC ATGAAATGKA AGGCTTCTG ACCGAAGAAG 780  
 20 AACAAAAAGC TATAAAN 798

## (2) INFORMATION FOR SEQ ID NO: 830:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTTGTC 60  
 35 ACGAACnGCT ACAACTAACA TTTTATCGTC TAAATAAGT TGTATTATATT TTTCTAATTC 120  
 ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTTAACAG 180  
 TTTAGTCATT CTATCACTAA ATGTTCCACT TGTTGAGATA AGGGGAGATT TCAGAGTCGT 240  
 40 GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC 300  
 AGATTCTTTG ATTGATANGT GnATAATCGC AGTGCATTAC ACAGAATACT GCCAAGTGCG 360  
 CCCTTAAAT TGTTATTAnC TTACCTCTAT ATAAGAACCC 400

## (2) INFORMATION FOR SEQ ID NO: 831:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



AAGTCTGCAT GACTTTTATT TGCAAGTTCG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA 60  
 GGATLACAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA 120  
 5 TAAATTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTACCA 180  
 TGCAAAC TAGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA 240  
 10 ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGGAAAAG GCTTGaTATA AGATGTATTT 300  
 TGTTTAGAAA tAGGTATATC AATCTGTAAT GGATCGCCAA CTTCTTCGAT ATAACGACTT 360  
 GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG 420  
 15 TTATAGTCTT TCGGATTATG ACTTGCTGTA ATCATAATGC CAGCAGTAGT ATTAA 475

## (2) INFORMATION FOR SEQ ID NO: 832:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 724 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA 60  
 30 TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC 120  
 AAGTACCTTG ATTATTTTGT TCTAAATGAA TGACTTCGCC TAACGATTTT AACGTAATAT 180  
 CTGCACGCTC GTCTTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA 240  
 35 ATTGTTTGTT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT 300  
 TTTTCTTTC AGCTTCTTGG CGTTTTTCTT TATCTTTTGG TGCTTGTCTT TTTTGTCTT 360  
 TTTGTTCTC TTCTTGTGTC TTTAATTTCT CATCTTTTCG TTTTGCTTTC TCTTCTTCAG 420  
 40 ATTCGCTTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTTATCGT 480  
 TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTGATAA ATCTCCGTTA TTTTAAATCT 540  
 45 CATTTAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGGCAA 600  
 TATTAATCGC TTCATCAAGA TGCCTTGTC CTAATTCCAT CCAATATAAT AAGTAGTCTT 660  
 TGTTTGAATT TGGTGTGACA TTATTAAGTA AATTTTCTTT CGTATCTGTn TCTAAACnT 720  
 50 GTTn 724

## (2) INFORMATION FOR SEQ ID NO: 833:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

	AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAACTTT TATTATATTT	60
10	GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTA AAAAATT TTGTCAAATT	120
	TAATTTTTCA AGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC	180
	TAATTTATTT ATGACGCTCT TTTGTTTAAT TGACATTCTT CAGCCATATT TTTTATGACT	240
15	AGTTGCATTT TTTACTAATA AACACCTCTA AAACCTTTAAT GATTTTAATC GTTT TAGAGG	300
	TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA	360
	CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA	420
20	TGATTTACCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT	480
	CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTGTG TTTGTTTCTT	540
25	TCTGAATATG ATGAATCGCT TTA CTGCAA CACCTGGAAG TACTTCAACA AAATCAGGTT	600
	CAACTTTTTT TATCAAATCT AACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC	660
	TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA	720
30	CGATACCTTT TGGCTTGAT TGCTGAATAA TAAATTCAT TGCAAATTCA TCGTGGCTTA	780
	AACCTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA	840
	TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT	900
35	TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA	960
	CTnGATCCAT CCTCTCTACA TCACACGCTT AAAT	994

(2) INFORMATION FOR SEQ ID NO: 834:

40

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 783 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

50	TCnACAAAGT CGGTATTAGG CTATGGGCCA TTnACTATT ATA ACTAATC GGAAATATAC	60
	CACATAACAT CATTATTGAG TTGATTCTAT CATTGGCTT ATTAGGGTTT TTTATCATAA	120
55	TGATTTCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG	180

ATTTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCTATTT TATTACAAAA GGACGGCGTC 300  
 ATCATGGCTA AGAAAGTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCTT 360  
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420  
 GCGTTCGGTT CTATTTTAAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480  
 AATACGCTTA ACAATATACG mTTGATTAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540  
 10 TGGAAATTTG CATCGATACT TTTAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600  
 GTATTTCTTT ACTTTTTTAA TTTGAACATC ATCGATATTA TCTTTTTAAT TCTACTTAAT 660  
 15 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTTTA GGATGACTTT AAAATATAAT 720  
 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780  
 nAT 783

20 (2) INFORMATION FOR SEQ ID NO: 835:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 794 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

30 TTACCTAATT TTTCAATCaT AAGATCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60  
 TTAAGCACGA GmCACTTCAA TATATTTTTC AGAATATTCT TATAAATATT AATATGATCA 120  
 35 TTTCACTATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180  
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAATaTC 240  
 TTAAAATAGA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAAC CTTTTTAAGC 300  
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360  
 TATGTTAAAC AAGGTTTGGT TCCGAACCTGG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420  
 CAAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480  
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAACTT 540  
 ACTTGAAAAA GTCGGTTTTTC CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600  
 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCAA ATATCAACAA 660  
 50 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720  
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAng TGGATTACCA ATATGGTAAA 780

## (2) INFORMATION FOR SEQ ID NO: 836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTTAACACCT ATGAGACAAG ATGGAACCTCG 60  
 TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT 120  
 CGTAGGTACA TTAAAAGCAT TAAACCAAAA TGATAAAGAA CTATACATTT TAGGTGTGTC 180  
 AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCTTAAG GATTTAATGC ATGTTAATGA 240  
 AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG 300  
 CATCGGCAGA GTATGTAAGT TtAATTCsTT TAACACTTTC tGGCGTTTTT TCGAGACTGG 360  
 TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT 400

## (2) INFORMATION FOR SEQ ID NO: 837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTTT GGGTACAATA GCTATAGAAG CTTGTTTAAAT TGCTCAAAAT 60  
 ATCGCACCTG GTTTTAAATCG CGAGTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT 120  
 ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA 180  
 GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA 240  
 GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT 300  
 ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTGaTCGT 360  
 GAAGAAgTtG AAGAAaTGTA CCGTTATATT GGTAAACTAA TGAAACAACA TCCATTTTTA 420  
 TCTACATACA TTT 433

## (2) INFORMATION FOR SEQ ID NO: 838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

	ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTCC TTAAACCTGA	60
10	AGAACGTAAG CAATGATTCC AGTAATTATT CCATTATAG TCAATGGTAT CGAAATAATT	120
	AAATTTTTC AGTAAACTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT	180
	ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA	240
15	CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTAAACTAA TCGCAGTTGC AATCGCTACT	300
	AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC	360
	AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TTGCTTGAGT AATTTTTCGA	420
20	ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT	480
	ATAATTAATT CAAAAGATCC AAGTTTGTTT TGTAATACCA TATATATAAG ACATGCAATA	540
25	ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG	600
	CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTACTATAGC AGCACCTGCA	660
	CCATTAAATT TAAATTGATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA	720
30	ATTAGTATCA CTAAGTATA CGTTAATTCT AAAATTTTCT TACCACTTTT AAATATTTTt	780
	AATACTTCAC CTAATAAAGC ATTCGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA	840
	TTTAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC	900
35	CTCCAATTTG AACATTAnAC TCATCA	926

(2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:

40	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

	CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT	60
50	TTGTTTTCTC AGCAATCTCT ACTAATTTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA	120
	CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT	180
	CACTAAATTC TTTTGTTGCA TCAATAATAT GACATTCAAC TGCTCCCAT TCTAAAGCTT	240

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CGTATCCTTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCct CckGAATATG 360  
 CTA AAAACAAT TTTCTCTTTC ATAAAATTCA CCTCATTGTA 400

(2) INFORMATION FOR SEQ ID NO: 840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1043 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60  
 CGACAATGAA AATCGTCATC GACTGTAAC ACATTGTTGA CATAAATATC ATCAGGTAAC 120  
 GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180  
 AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240  
 TGTCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATT 300  
 TGTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360  
 ATGAATTTAC ACTCCTGAAT ATTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420  
 GGTAAAGAT ATCGTATCTC TCAATTGCCA TTAAAGCTGT CTGTAGCTCG TTCTCTTAAC 480  
 ATTGGCATCA TAACCCTAA CTTCATTGC GACCGCTAAT TCTTCGGCGC GTTGGAAGC 540  
 TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCC 600  
 TGAACCTTATT TCAGAACCAC GCGACTTTTG CGCCAAAATG ATTTTATCTA ACTCATCCAT 660  
 TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720  
 TTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780  
 TGTAGATaGT GTCaTAATTG TTGCAATCAT TAcAATCCCA ATTAAACGCA GTGrTATATA 840  
 TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900  
 TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960  
 TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTGTCT AATCTCATAA TGAAnAnGAT 1020  
 AAGTGCAAAC ACCCAAAGAT ATG 1043

(2) INFORMATION FOR SEQ ID NO: 841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60  
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120  
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAAGAA AACTGTAGAA GTTGATGGAT 180  
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAAGAT GCAAAATCTA 240  
 ATAAATATGC TAATAAACCA GCTGAAGGTC ACGCTAAAAA AGCTGACGCn GCACTGAGAG 300  
 nTCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343

(2) INFORMATION FOR SEQ ID NO: 842:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60  
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120  
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAACACCA GGTCATCCTG AATACAGACA 180  
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGGACAA GGTTTTGCTA TGTCmGTAGG 240  
 ATTMGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300  
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CGGTGATTTA ATGGAAGGTA TATCGCATGA 360  
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTTTTTAT ACGATTCAAA 420  
 40 TGGATATTTTC 430

(2) INFORMATION FOR SEQ ID NO: 843:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

GGACTGCCCCG ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60

TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180  
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAACTA GTGTAATGAT 240  
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCCTGAGATT TTCGCTTTAA TTTGAAAACC 300  
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

(2) INFORMATION FOR SEQ ID NO: 844:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACanTTCT 60  
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAAA ATCTTAATTG ACATTTTCAA 120  
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTTTCG ATTTGTATAA 180  
25 ATTTCTGTTC ATCTATTGCA TAAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240  
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAATTTGC CATCCGCCAG 300  
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360  
30 AATTTTTTTAA CCTTGGGCnG ATTACGTCTA nGGnGTATGT 400

(2) INFORMATION FOR SEQ ID NO: 845:

- (i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 535 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

45 CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60  
TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTTGA ATATGACTAT 120  
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180  
TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240  
50 CGTTTTCACT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300  
GTTGTGTTGA TGTAGTTTCT AAAAGTAACA ATGCTGTTGA TAAAACTAAT TTATTCATGA 360



ACCGATTCGG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAAC TTAAAC AGTTAGTAGT 480  
 GTTATTTAAG CAAAATTAT CATT TTTAAG TTGGACAGAA CAGATCAATA AGAGC 535

(2) INFORMATION FOR SEQ ID NO: 846:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 509 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTTGTATG ATCAAAATAA TGATTGTTGG 60  
 CCATATCTTT ACTATGCTTA CGTGCAGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120  
 ATAATTGATG TTGTTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAACTAT 180  
 CTGCAAGCGA TTTCGATGGT GCTCCATATT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240  
 TTACTTGTA AAGAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300  
 AAATGTGATT TTTATGGAAA ACATCATATT CTTTATTATT TTGTTTCGTAA CGCACTCTAC 360  
 CTTTAACAAT CTCTGTTTCT GGTTCGCCTA ATCTTTCGCT TACAACCGAT TTAGGTGTAT 420  
 TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACCTT 480  
 TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60  
 AGTATCTTTA ACATCGATGT GTGTATAATC ATTTT TAGAA GTATTATAAT CTTTTTCTTC 120  
 TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180  
 AAAC TTCGCA TCATATGTTA AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240  
 TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTGTG AGTACCTTTT CACAAC TAGT 300  
 ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

## (2) INFORMATION FOR SEQ ID NO: 848:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTTTAAA CCATCACGAA 60  
 CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA 120  
 AAACATCTTC AAGTGATAAA TCTTGAATTA TTTCCTCAC TAGATTTTCCT CCTCATCAAA 180  
 TTGATCATTT TCAAGCACTT GTACTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT 240  
 ACCAAACTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG 300  
 AATGTTGTTA CACGTTTAGA TGGAACGCAC TTGCATCTTG CAACTTGTGA CACGnATTGA 360  
 AAGTTnCGTG TTTGCGGGGG TThCAGCGTC GTTTGCCCAT 400

## (2) INFORMATION FOR SEQ ID NO: 849:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTTGAGG AGTTAAGAGA TTTATTTAAA GAAGAAGATT TAGAACCATG 60  
 GACATCATGC GAATTTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT 120  
 TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTCGACAA AATTACTATA AGTATAGAAA 180  
 ATTTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA 240  
 TATTAAAGAG CTAGAAGAAT AACTATCTT AATGTAAGAC TAAACAATAA AGCTTTGTTT 300  
 AGTCTTTTTT GCGTTTAAGT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA 360  
 ATAATATAaA GATAATTTTA GGTTTTTAAA CTTTTAATCG 400

## (2) INFORMATION FOR SEQ ID NO: 850:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 923 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60  
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120  
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aATGTTAAA 180  
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240  
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300  
 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTC TATTGATCCT TATACAAACT 360  
 ATGGACGTCC AAATTCTAAA TATGAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420  
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480  
 20 GATTTTCCTA ACTTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAT 540  
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTTA 600  
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660  
 25 TGCGCGCTTA ATAACAGAAT ATTCTCAATA TTTTATTTT TTTGTGATTT GTTGAATAT 720  
 TTAGTTGATA AGGCACAATC AAATTTACTT AAATATTGT ATTAGGGGAA GAAAGGATGG 780  
 GATGTATACA TGACACAACA AAATCCCAT GGAAATCAAA TTCAAGACAT ACCTCAAACA 840  
 30 GGATTTTTCG GGcATCCTCG AGGACTAGGC GTACTCTTCT TTGtAGAGTT CTGGGrAAGG 900  
 KTTAGTTATT ATGGGCATGC GTG 923

## (2) INFORMATION FOR SEQ ID NO: 851:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1004 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTCACT TGGTGTAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60  
 GctCAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120  
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180  
 50 GGTAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240  
 AAAGTCGGTA TAGGTCCTGG TAGAGTTTGT ATTACAAAGA TTAAACAGG TTTTGGTACT 300

GCCGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCATCA 420  
 ATGGTCATGA TTGGTTCATT WTTTGCGGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480  
 5 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCa AAAAGGCGAA 540  
 CATAAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATAACC 600  
 TTAAAAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660  
 10 AAATCATTAC GtACTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CCGTGATAGA 720  
 GATTAATATT TATAGTAGGT GAKGTAAATT AAAAAATTCA TAGTAACTGT TGTTGCGTTT 780  
 TTATCAATTA TTATCATTGC GCCAnTAACA GAATTTAAAC CATTcATTCA TTTACAAAAT 840  
 15 GAAGTAAGAC AATATATTGA CATTcACATC AATAAAGAAA CAATTTCTGC GGAAAATAAA 900  
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTTAATAATA TACAAATGAA CATGTCGAAA 960  
 20 TCAGATGTTG AGAAAACATT AAATAAACCA AAAAGAGTGA CATn 1004

## (2) INFORMATION FOR SEQ ID NO: 852:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

GTTCGCTCCA ATGTACGCAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60  
 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTTGCATCCA CCATGTTAAT 120  
 35 ATTCTCTTTA TTAAATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180  
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAAACT TTTATATAAA TACCAAAGTA 240  
 40 TGTTTGTTCA AAAATTTGCG TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300  
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTTGGATAT ACTnAATGGT nnCACACTCA 360  
 GTAGGAAGCA CGCATTCGCT CGATAATGTA ACCATACTCA 400

## (2) INFORMATION FOR SEQ ID NO: 853:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAACTGG AAAATAATAA 60  
 TTACCATCAC TCITTTTGTG GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120  
 5 GCTTTCTCTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTTTGC 180  
 GCTAAATTAC GTACGTCAGT AGGAaACTC TTGTCCTCGA CATTAACTTG CACATGCTTC 240  
 TTATCTTTTG CTTTGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300  
 10 GAaATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360  
 T 361

(2) INFORMATION FOR SEQ ID NO: 854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 605 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

ACnTTATACT AGAnAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60  
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTTA TTTATTTTTG ATTGTCATAA 120  
 TCGTGTGGTT TTAAATTAAT TGTTTCTAGC TTTACAAATT TTGTTTTGTG AATGATTTTA 180  
 30 TGAATAAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240  
 CATTGATCTT TTAATAATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTGTAGTG 300  
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360  
 35 TCTTGACCTT GTTTTTAAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420  
 CAAACAACTA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480  
 40 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540  
 GGTAACCTAG TTGTCTTGT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACTT 600  
 AAGGA 605

(2) INFORMATION FOR SEQ ID NO: 855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TTGAACAAGC ATTTTAAAT AGTCAACAAC ATCAmGCAAT TAGTGAAGAG GCACAACTTT 60  
TAAATAATCC AGATGAATTA ATGGCATTIT TAAAGAATAA GCGTAAAAAT ATTTTAGAAA 120  
5 ATGCATACAT TATGCCGCAT AATATGAGAG AAATGTTACG AAGTTATTTG GAAAGTATGT 180  
CTCAAGACTT TAATGTTGGC GGATTTTTTA ATAAAAAGAA GAAAAAACTA CAAATTCAAC 240  
AACAGCGATT ATTAACAGCG ACAGATGCGT TACAAGAACA TGTTAATCAA CAAATTCGTC 300  
10 AACCAATGCG AGAAGATATG TCATTGTGTA CGCGTTTTAT CAATAAAAAA GmAGCTTCAG 360  
aTAmAGTATT AAATCAGCAT TATGACGTTA AGCCAGAAAT GATTGAAGGT TTATATCAAC 420  
CACAAACATC AATCAGCAAT ACTTATGTAC TTACATTTTC AGACGAAGTG GTTAAAGCCA 480  
15 TTAAGAAATA TGTTGAACAA CAATCAACAC CAATT 515

(2) INFORMATION FOR SEQ ID NO: 856:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 1607 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

GTCATTTTTA AAATTCGCA TTCGCGTTTA ATTTTTCTC TTTTTCTTT TTCTTCTAGT 60  
30 GACATACTTT CTTTAGGTGT TTCAACCAAT TCAGATGTAT CTACATCATC AATTTTAGTG 120  
ATTTGTCTA CATCTTCTT TAAATCTTCT GGGACGTTCT CGAAACGCTT ATATTGCTCT 180  
TTAGAGATAC TAGCAGCTAT TTCATTAGCT CCTAAATTT CATCTATCAA GCCGAAAGAC 240  
35 AAGGCTTCTT CTGCAGTAAG CCAAGTTTCT GCATCTAACA TCTGTTTTAA GTGTTCTTGA 300  
TCTAAATCTT TTGCTTTATC TAAATAAGCT GAATTACTAA CAGCATCTGT TTTTCAAGT 360  
40 AAATCCGCTG TCTTCTTAA TTCTTCTGCA TTACCTACAG TCATAACCCA TGAATTATGA 420  
ATCATTAAAA AACTATTTTT GTGCATAAAA ATAGTGTCAC CACTCATAGC GATAACACTA 480  
GCAATTGATG CCGCTAAGGC ATCGACATAG ATATTAATTT TTGCAGGATG CATTTTTAGC 540  
45 ATATTGTATA TTGCATGTCC TTCAAATACA CTGCCCTCCAG ATGAATTTAT ATGAACATCT 600  
ATTTCACTGA TGTCTCCTAG TTCATCTAGT TTATTTTTGA AATCTGTAGC AGTTACATCA 660  
CTTTCAAACC ATTTATCACT TACAATATCA CCATAAATGa ATATTCACC TTTACTTTTT 720  
50 GATTTTCTTT TCATTTGAAA ATAATTAGCT TTCATTGACA TTTTATCAC CACCTTTCaA 780  
AGATTTTCTT AATTCAAGTG GCGTGTCAAT TGGGTATAAA TCACCGCTTA ATTAGCGGCT 840

AACCCTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCCTATCA GCCCTTAAAT 960  
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCT GTCTGTTTAA GTAAGTAGTT 1020  
 5 TCCGATTAAh TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080  
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCATTT AAGAATATTG 1140  
 10 AGGGCAATTG AAAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCACTATAT 1200  
 CTCAGAGAC ATATTTTTTA GGTAAAGGTT CGATTTC AAC ACCAGGCTCT TGAATAATA 1260  
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320  
 15 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380  
 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440  
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAATG CAACATGTCC aTATTATGAA 1500  
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGAATAATA AAGTTCACcG TGATTGGTTT 1560  
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

## (2) INFORMATION FOR SEQ ID NO: 857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60  
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120  
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180  
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACTT GCAGAAAAGC 240  
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGGnATAA CTACAGGATA 300  
 TTACCGGCAT TGGGGGTTTA AAAAATTCCC AGTnAGAGGT ATTnCC 346

## (2) INFORMATION FOR SEQ ID NO: 858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAAnATAA TGGACTTTAG 60  
 AATTTmAAAT TACAATAAAT AGTTCTATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT 120  
 5 TGAAAATACG AACGAATGaG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG 180  
 GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA 240  
 TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA 300  
 10 TTGAAAGAAA AATATTCACT ATTCGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA 360  
 ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG 420  
 ACACCATTAAGCCAAATTGG TGTGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT 480  
 15 CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCGAACGA 540  
 GATGTACCAT ATGTATTAGA TACAATTAAA CTTTAAACAG AAGAAAAGTT AAATGTGCCG 600  
 20 CTAATAGGAT TTAAGGGG ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA 660  
 TCGAAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT 720  
 TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT 780  
 25 GCCGAATTGA TTCAAATTTT CGATTCATGG GTAGGTGCAT TAAATGTCGA GGATTACAGA 840  
 CGTTACATTA AACCACATAT GATTTCGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG 900  
 CCGGTAATTT TATTCGGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG 960  
 30 ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAATC AGGCTCAACA ATTAGGCGTT 1020  
 ACTAAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT 1080  
 35 GAAGAGAGAT TGAAACCAAT ATTAGATcAA GGTATGGAGA ACGGTAAACA CATCTTTAAT 1140  
 TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA 1176

## (2) INFORMATION FOR SEQ ID NO: 859:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

ATTTGGTGCA TTGGTAnAAT TGACCTGAAA GnAAAAAAGTG GTTTAGTTGC ACATTGAGTG 60  
 nAAGTGC GCA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG 120  
 AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TcAATTAAGA 180



AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300  
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360  
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420  
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480  
 10 GTAATGATAT AACTAAGACT TATACCATTT TTGAAAATTG TAAAAGTGAG GTGATGTTAT 540  
 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTGCGTG TTTCTACAGG 600  
 TATTGATAGT ATGTGTTTnn T 621

(2) INFORMATION FOR SEQ ID NO: 860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60  
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTTGTGAGAT ATATTGGAAT 120  
 30 GACTGTCGGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180  
 AACTATAACT ATCATGTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTCAGCT 240  
 AAAGTATGCC AAATAAACTT AAAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300  
 35 TGCTTTTTGT TTATAGAAAT TTAAAATTCA TGCCTTTATG CTAACAACAA TATTATTTTA 360  
 CTCTCTTACG TTTGCCAATG TAACcGTATA GCAAAGTAAA TGACTGCGAT AATGATGACA 420  
 ACATACATAt ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480  
 40 AAGTGCGnCT GGTAAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540  
 ACGG 544

(2) INFORMATION FOR SEQ ID NO: 861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

AATTTAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATTT TCATTTATAG 120  
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180  
 5 TGAGGGATTTC AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240  
 CGAAGAAACT TTAATTCaNa AnATTAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300  
 10 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360  
 GaAGGTTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420  
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480  
 15 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540  
 AATCATTACA CATTTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtTCGA 600  
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTn nAAATGCAAA A 651

(2) INFORMATION FOR SEQ ID NO: 862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:

TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60  
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAAACACT 120  
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180  
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240  
 TATGTTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300  
 40 AATAATAAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360  
 GaaAAGaGAT ACTGGcAATT TTAATAACCA GtATCTCTTT T 401

(2) INFORMATION FOR SEQ ID NO: 863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120  
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC nGATGCTACT ACTTATCTTA 180  
 5 ACAGTTGATT AAGTAAATCA TTAAACAGCG AGATTATnCA ACCAGGGGGA TGACTTAATG 240  
 AATTTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTCAGCTTT 300  
 AATGCCAC 308  
 10

(2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1827 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60  
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120  
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180  
 TAAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240  
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTTAT CGAGTTTAAA GAAGGAGCCT 300  
 TTTATATAAC TTTTAGCAAT GTAACGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360  
 TTGTTGGAAA TATTTTTGAA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420  
 35 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAAACTTCA 480  
 CAAAGCATTA AAAGATCGTG AAGAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540  
 AGCGAAGTTA CGAGATTGTA ACAAAGAACT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600  
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660  
 ATTCGGAATG GAATTAAACA ATAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720  
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780  
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAGC GTTTGATGAA ATACTTGAGG 840  
 GAATGACAAA TGCTATTCAA CATTCAAGTTA AAGAAGGTAT TGAACCTGAT GAAGCAGTAG 900  
 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960  
 50 TTACAAGTAA AACTATTATC aAAAAATGCT AGAATGCCCG AACGAAATCA TAAGACGGAT 1020  
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTAAGT AACCACAAGA AAAAGCAGTG 1080  
 55

AGTGGTGTA GTAGTAAAC GTATTTAGTG ATTGAAACAG GCAAGATAGA CGCGGGATAT 1200  
 CATGGCAATT TAGGGATTAA TATCAAGAAT GATGAAGAAC GTGATGGAAT ACCCTTTTAA 1260  
 5 TATGATGATA TAGACGCTGA ATTAGAAGAT GGATTAATAA GCATTTTAGA TATAAAAGGT 1320  
 AACTATGTAC AAGATGGAAG AGGCATAAGA AGAGTTTACC AAATCAACAA AGGCGATAAA 1380  
 10 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC 1440  
 GAAAGTGTTT CAGAACGTGG AGCAAAAGGC TTCGGAAGTA GCGGAGTGTA AAGACATCTT 1500  
 AGATCGAGTT AAGGAGGTTT TGGGGAAGTG ACGCAATACT TAGTCACAAC ATTCAAAGAT 1560  
 15 TCAACAGGAC GACCACATGA ACATATTACT GTGGCTAGAG ATAATCAGAC GTTTACAGTT 1620  
 ATTGAGGCAG AGAGTAAAGA AGAAGCTGAG CGCAAATACG AGGCACAAGT TAAGATAAGG 1680  
 AGAGATGGAG ATGCCAAAGA AAACGGTAAC GATTGATGTA GATGAAACT TATTAGTAGT 1740  
 20 AGCTAGTAAT GAAATATCAG AACTATTATA TGAATATGAC AGTGAGTtAA TGTCAGCTGG 1800  
 ATGGAAGATG GCGATAATAG GGATATC 1827

## (2) INFORMATION FOR SEQ ID NO: 865:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

TCAATTGCAT CATCATATGA AATTCTaGGG AATGGTGTG CAACTTTTTC AAGTTTGTAT 60  
 GTATCACGCT CTAAAATTTT CAACTCTAGT TTACAATTTT CTAAAACCTGA TTTTACAACA 120  
 TGTGTTACAT ATTGTTCTTG AATTTCTAAA CTTTCAGCAT GATTGTGAA AGCCATTCTT 180  
 40 CCTTCAATCA TCCAGAACTC GATCAAGTGT CTACGTGTTT yTGATTTTTC AGCTCTGAAA 240  
 GTTGGACCAA ATGAAAATAC TTTTCCGTGT GCCATTGCTG CAGCTTCTAA GTATAACTGA 300  
 CCACTTTGAG ATAAAAACGC ATCTTGATCA AAGTATTTAG TATGGAATAA TTCACTTGTA 360  
 45 CCTTCTGGCG CACTTGCTGT CAAAATTGGT GGATCAACCT TTGTAAATCC ATCTTTGTTG 420  
 AAAAATTCAT ACGTTGCAG AATAACTTCA TTTCTAATTT TCATTACAGC ATGTTGTTTT 480  
 50 TTAGAACGTA ACCATAAATG ACGGTGATCC ATTAAGAATT CTGTACCATG ATTTTTAGGT 540  
 GTAATCGGAT AGTCATGCGC TTCTGAAATA ACTTCAATTG ATTTCACTTG CATTTCTGAT 600  
 CCTAAGTCAG AACGATTATC TTCTGTAATT GTGCCTGTAA CGTATAGAGA TGATTCTTGA 660

TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAACGTTTA 780  
 TTTGTTAACC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC 840  
 5 GTTGTTTTCA TAACCATCTCT CCTATTTATT TTTTCGKTAT ACAATACTCA TTCATTTTAA 900  
 CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAATGATT 960  
 10 TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA 1020  
 ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG 1080  
 TTTAATTATA AAACCTCAAAT TTTGACGACC AAACAAAAAT TCTTGTAACA GAACATAGCA 1140  
 15 CATGTCATGT CACAAGAATT TTACTTTGTA TTTCACTTTT TCTTTTTTTTG AATTTGTCTT 1200  
 AATAATTTTC CAAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTtTGT 1260  
 TCAAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG 1320  
 20 CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT 1379

(2) INFORMATION FOR SEQ ID NO: 866:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT 60  
 35 GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTGT 120  
 CTTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT 180  
 TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAC ATCTAGCATT GTAATTGAAT 240  
 40 GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG 300  
 CAATTCGCTT ACTTGGACCA GGTGGATGCG CTTTAAAAA AGTTTGAACA AGAACATCTG 360  
 45 aACCATAATC TACTTTatCt TTCGAAAACA CTCctTATCA GTTATTAAAT CAATTTTATG 420  
 AnGGTTnTAA TTGGATATTG AGTACGTTGT 450

(2) INFORMATION FOR SEQ ID NO: 867:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5 AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT 60  
 CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA 120  
 ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTTAATAGTT 180  
 10 TTAACTTTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA 240  
 TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA 300  
 TATCAGGCCA TATAGCTACC TGTCACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA 360  
 15 CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG 400

## (2) INFORMATION FOR SEQ ID NO: 868:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 1132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA 60  
 30 AAAATAACnT CTTATGATAA AAATGAAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC 120  
 AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA 180  
 AATATACATT TAAACCTAAA GATTTCAAAG CGTTCAACGT AGAAGGCTTA GACGCACGAA 240  
 35 TGGAAGCTTT AAACGAATAC ATACGaCCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG 300  
 ACTTCTTTAC AAGTCAAAC TTTATCCTCA CGTAGCAAAG CATGCTAGAA 360  
 GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA 420  
 40 AAATGTTACC TCATTTCCAA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGGAA 480  
 TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTTGAAAGA AAATTTAAAG 540  
 CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC 600  
 45 CATTTATTAA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG 660  
 TGAAAAAAGG TGAATTCITT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA 720  
 50 GTGACAAAGC ATTTATTGCA TTTTLAGAAG AAACCTTCGA TCAGTTCTTA CCATTTTATT 780  
 CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC 840  
 TTtTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA 900

55

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020  
 TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTTC 1080  
 5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

## (2) INFORMATION FOR SEQ ID NO: 869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGACTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60  
 20 ATCAAATATT ATATTTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120  
 AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCTTCTGGT AAGATCGCTT CATCAACACC 180  
 CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGTAATT GTTGCGCACT 240  
 25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300  
 CTTATACTGT TGTTGAGTAG TACTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360  
 30 ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGGAAAAG nCGTTTGATA AAAGGGCT 418

## (2) INFORMATION FOR SEQ ID NO: 870:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60  
 GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120  
 45 GATTTCGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180  
 AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTAAAAGC TTATGAAGAA 240  
 50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300  
 GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCCTAGT GAGATATAAA 360  
 AAAATAGATA CATTATTGAC GGAAAATGAA TCTAAAAATC TGGTTTTCTT TTCAAGGCAA 420

TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540  
 GATATAGATA CTTCATTAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

(2) INFORMATION FOR SEQ ID NO: 871:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCnACACCAA 60  
 TAAACGATGC AAACACAGTn TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120  
 TTGAATAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTTAACAAT kCGGCGATTT 180  
 GTTTTGCTTT TTAAACGCCT TCTTGTCCTT TAAATCCACC CGAGATTTCT ACGCTATCAG 240  
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGTGCTT 300  
 CTTTTTTATA GCTGTCACCT TTTTTGAAAT CTAACCAAAC AACCATGACA TTATCACGTT 360  
 TCTTAGAGAT TTCTTCCGTT ACTTTTTTAA ATTTGTTTTT GTCTTTTACT TTAAAAGTAA 420  
 CTGTAGGcTG GTTTGTTTTCC tGtTTAAATT CTTGtTTGGC AGATCCCTGT TTaATATCAG 480  
 AACCGCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540  
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTACTCTA ATTCTATTAG 600  
 GTTCTTCAAC TTGAATTTTA GGTTCCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660  
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720  
 CTTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780  
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840  
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900  
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960  
 ATTAACATAC T 971

(2) INFORMATION FOR SEQ ID NO: 872:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 636 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

5 CTGGTTAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGTCTTGG 60  
 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120  
 ATGCCGTTAT GACCTTGTG AAGTATTGGA TTAATACGAT CTTTAAGTGC TTGTTTTTCC 180  
 10 TTATCTGTTA GATTTGGATT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240  
 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCAT TGGCATGCAC TTGTTCAATC 300  
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360  
 15 TTGTIGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTTGTCTTGA 420  
 TCCGTCGCAT TTGAAGCTTC GATTTCTTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480  
 TGAATTGCCT TGTCTTTAGC ATCTTGTAAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540  
 20 TCATTGACTg CTTGGATTGC GCCATTGATA TCATTACAT tTGTGTaTCA CTATTTAGCA 600  
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

## (2) INFORMATION FOR SEQ ID NO: 873:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

35 CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTTTAG 60  
 AACTCAATCC GTAAAAATTG TCAACTTTCT TTTTAATATT ATCGTAATCA ATGGTTACAT 120  
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTAAAGCCC GCTATACTGA 180  
 40 AAAAGCCTTC AATCGGCTGA TCAATCATT CAATATATTT TAAAGCTGTG ATTGAACCTA 240  
 AACCATGTGT TACAAAATAT GTATCCTTTT TCGGTACATT AATTGTGTTT GTCATAGCTT 300  
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360  
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420  
 GCATAGAATG TACAATAcTA CATCTGTCAT CTCATTCTCT CCTTTCAACT TACTACTTCT 480  
 50 TTTCTATTTT TAAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAC ACCTTAATTA 540  
 GAAATGTTAT ATCGCAAAGT GACATTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600  
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTTCA CAAAATAAT TCCCGCTGA 659

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

AAAATAAAAT CCATTTTAGT ATTCGTAGAA AATGAGAGCC CCCTTTACCA CAATATGTAA 60  
 ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTCAG 120  
 TTGATAATGC AGTGCGTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA 180  
 TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCTTAAAC GCAGATTAAT 240  
 GGTCATGATG TGTTAaTGCG TTTTGTTTTT TAGAGCCACG TAATTCCCAa GGACATATAG 300  
 GAGGAACCAT TCCAC 315

(2) INFORMATION FOR SEQ ID NO: 875:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

TACACGACCT TGTAAGTCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT 60  
 ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTTAATATAT GTCTGATACG 120  
 TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC 180  
 GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT 240  
 ATCTTCACGA CTCTTATTTT CCATTAWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA 300  
 ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT 360  
 CTCCAACACC TTGTGGAAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC 420  
 ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC 480  
 GT 482

(2) INFORMATION FOR SEQ ID NO: 876:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 670 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60  
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTT ATTACTAATT 120  
 10 ATCCAATAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAAACTGTAT 180  
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGA TCTGAACGTG 240  
 TGGATGACTT AGAATTGTTA GAACAACGCG TTAAGAACA TGGATTAGAC GAAGAAGCAT 300  
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC AACTGTGGA TTTGGTTTATG 360  
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420  
 TCCCAAGATT ATTAAACCGT TTATATCCAT AAGTTTTAGG GTCGTTACTT AAAATATATA 480  
 20 TTATGATAAT AAAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGGA 540  
 AATGAAGATT GATAACGGCT TATATTAATC ATGAACAAAC TTTTGTTTATG TAACTATATT 600  
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTTAAAATC TAGTGTTAAA 660  
 25 AAATACTGTT 670

## (2) INFORMATION FOR SEQ ID NO: 877:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

40 TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60  
 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120  
 GATGATTnTC TTGTTTTCAA CCTTATACAC AATATTTTTG AnATTTATAT TATATTCATA 180  
 45 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACCTA 240  
 TACTATATTT ATCaACaCAA CAGTTTTTCC TTTCATTTTT AAACATAACA GAAAAAGCCT 300  
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAA GATATAACAA GGTTAATCAT 360  
 50 TCAAAGCTAA CATCACATTT ATTCACTGTA ATTTTTCATA AAGAATAATA ATGACTGTAA 420  
 TTCTATACCT AAGTCAATTT GATGTACTTG CACATCTGAA GGCGTATTAA TTCTACCAGG 480  
 55 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGGACGAGT TCATCTGCAA CTTTCTGTGC 540

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660  
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720  
 5 AGCTTTCCCT AGGTTCCCAA CTCCGACAAT TCGGATTTTG ATCATGTCAC TCTCGCTTAG 780  
 TTCAGATTTA AAGAAATCCA ATAAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840  
 TTCGCCAAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900  
 10 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960  
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGGTCAC TCATTGCTA 1020  
 15 TTTCCTCCTT CGTGTTTGAA TGAATTATAT CTATGTATTC AAACGAGTTA GAGCGTAATT 1080  
 GTTAGATTAT TAAAArACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTAWT 1140  
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200  
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATTT GAGAAGACGA AGGTGAAG 1258

(2) INFORMATION FOR SEQ ID NO: 878:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAAA TAACTTTGGA AAGGATGTTG 60  
 35 TTTGTnATTC CCATGGACAC ATGCCATCTn ATTTAAGTTT TATACTCTAT TTTTCTGATG 120  
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTTGTTCAAG CTCATATTCT TTATCTACTT 180  
 GCTTACCGTT TTCrYTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTTTTTCAG 240  
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300  
 CATCATCATA AAAAGATGAT CCTTTTTTTA TATATGATGA TACAAAATCA AAATCCGACT 360  
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTGTCTCT 420  
 45 TCAAGCTGTT TTCTTCTTTT TCTTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480  
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTCGTCTGT 540  
 50 GATGTA 546

(2) INFORMATION FOR SEQ ID NO: 879:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

	TTTATGAATT TTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCCTAC TATkTCTkTT	60
10	ATATATCCTT CTCTCCTTC TTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA	120
	ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAAA ATTCTCTATT AAAATAACCC	180
	CATTTCCCAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT	240
15	ATCGTTTTTA GTaGCATATT ATTTGAATGC CCCAAATTAT CKATCACKtC AATTCTGACA	300
	TCATTTATAG AATTAACGTC ATATTTTAAT AAGTAATCTC CTATTTCACT GATGTAATCA	360
	ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT	420
20	ATATTGACGT CGAGCATATC ATCTAACAAG AGTATCATAT TACTTAGTTC TAAAAATCTT	480
	GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTCG ATAGTTTTTT TAGCAATAAA	540
	GTATCTAATA CTTCTATTTT ATTCAAGTCT TTAAAGTTA CTATTCTAGG AAATTCACCTA	600
25	ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT	660
	ATGaATTGCT GcTTTCTATT CGGtACACGC AATGaAATAC TTGTACCACA AGTCCATTGt	720
30	TTTTCCaAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGaCT GGaTATATAA GATTCTGAAG	780
	GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTTGTT	840
	GAAAAAAATT AACATTTTnA nTAACTAnGG	870

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(2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

	GGTTTACATC TTTATCAACT GTAATTTTCAT TGACATCTTC ATTCATATTT AAAACACCAT	60
	TAAATGTCCC TGAATATTCA CTGTTTGTGTT TAACTGTGGC AGTGACTTGT CGTTACCATA	120
50	TGTCATCATA TATTGTGCAA ATGTTAAAGT CCCATTGAG TTGACCGACA AAGTTGAATT	180
	TATCGAATTG TATTCAGATT GTAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC	240
	CAAATAGnCC TTGTCTGTTA TTTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT	300

55

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

AAGATATTGC GAAAAGAAGT GACAGTAACA GAGGAATTTC AAAATTTATT CAACCATATA 60  
 TTGAAAATTG ATGAAATGGT GCATGCAAAT GAAGCGCGTA TTGCGTATGA AGCAGACATG 120  
 CGAAAACCTT TATATAGTAA ACGCATTAT CAAAATTTAA CATTAGACTC TATTGTTTTT 180  
 AGAAATACAT TGAGATATAC AGCGATTATG ATGATAGCGG ATATTTATTG CGTTAATGTT 240  
 TGATTTTGAA AAAGCATCCT GGATCCCGTT ATCTGCACAT CCAATATTCC TAGGGCCATC 300  
 AnCCTATACC ATGCCATCCG AGAGAGGTAT GGn 333

(2) INFORMATION FOR SEQ ID NO: 882:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 617 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

ATTGAAAGAA AAAGTACGT ACTTATCCGA TGATAAAATG AAAGAAGTAG ATAATGCACT 60  
 AATGATTAGT TTAGGGCTGA ATGCAGTAGC TCACCAGAAA AATTAGGCGT CTATTATATG 120  
 TATTTTTCAG AGATAAATAA AATATTGATA TAAAAGACAA TAACTTTATA ATAATTATAA 180  
 CTATTTCTAA ATTCTGTACG AAGAATTTTC TTATAAACAA AGATTTTAGC AAATACCACT 240  
 TATGATATTC ATATTTTTTA TTATAAAGG ATGTCTTAAG TTTTTTAGGC TTTAGGTATT 300  
 CCATCCTAAA GTTTTTTTAG CTAAAAGTA TCATCTACAG CAAAATTGCA AACGACAAAA 360  
 TTGATAAGTG CAATTAAATA AATGTTAGTA AGTGAATCAT AATTATCCTT GCTTAAGCAT 420  
 TTGCTTTGTA AGGGAAGTGA GGAGGCAACT AATCGTGGAA GAATTTAAGC AACATTATAA 480  
 GGGTTTAATT GATGAAAGTT TAACGTGCCA AGATAAAGTA GAATTGATAA AAAAGTGTGA 540  
 GAAATACACT GACGAAGTGA TTCGTAAGGA CGTCTTGCCCT GAAGACATTG TCGATATTCA 600

## (2) INFORMATION FOR SEQ ID NO: 883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

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GTTGTATTAA AATTTTTC AA TTTAACAACG AAACAATACG AAGAAAAACA TATTACTGAG      60
CCACTGGAAT TGACGAGCTT ATTAGGTAnT ATTTCTCGTC TAGACAATGG TCATTTTGCA      120
CATTTGCATG CTACTTTCGG TACTCAATCA TATGAACTT TTAGCGGACA TCTCGCTAAA      180
GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTGGA CATTCAACGT      240
TCATTCAAAG ATGCAGTCGG TTTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTTAG      300
TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA      360
TTAATATACT TCAACGAGTT AAATTAAATT TTTAATTAGG AATTGAATGC GTTTATAACT      420
ATCACATTTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TktATTATTG aTGCAATCTC      480
GaTACATCGC TAGAATTTAC TTTtaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT      540
TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT                          583

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## (2) INFORMATION FOR SEQ ID NO: 884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

```

GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCAGTCAA ACTCACAAAA      60
GcTAACGCat GwyTGCTyCA TTCGTGCGAT ACACTTTTGA TACATCTACA CCAATACTTG      120
ATATCGTTTC AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATAtACG      180
CTTGTTGTCC LAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTTGCT      240
TCGTAAATGT TTGAACATCT TTTAAATTCG CATTTGTAAC ATTTGGAATA AAATCAATTA      300
ACGCTTCTCC TATTGAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT      360
AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT      420

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TGTATCAACA AAAATTTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

## (2) INFORMATION FOR SEQ ID NO: 885:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

15	TTAATGATTT CTTCGTATGA TTCACCAACA ATTTGCGCTA AAATATCATG CGCAAGTACT	60
	TCACCTTCAA CCATAAATTC TATTTGCTCT ACTAAAAATT TTACGTCATT CATGCTATTC	120
	ATTTTTGGAA TTAACAAAGC ATATAAGTTT GTAAATTCTT TTAAATACGC AGCATCAGCT	180
20	TTTAAGTAAT GGC GTAATGC GTCACCTCCTA TATCTCCGGA TAACATCTTC TGAATAAAGT	240
	CATCCTCATA AATATCATAA TGATGGCTTG CAGCTGGGTA CAATTTTGTG AAATTCCATG	300
	TAAAAATCCT CCCTAAATAA AAAACTACTT CCAACATGAA GAGTTGAGGC ATGTGCAAAC	360
25	TAGCCCATCA CTCATAACAC TTCCACGTGG GACTACCAAC	400

## (2) INFORMATION FOR SEQ ID NO: 886:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 857 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

40	AAGAATTTAA ACAAATGAT ATTTGGAAAC ATTTTAAAGC TGTGAAAAAT AATCATGTTT	60
	ATGACTTAGA GGAAGTGCCA TTCGGTATTA CAGCAAATGT TGATGCTGAT AAGGCAATGA	120
	CTCAATTATA TGATTTATTT TATAAGGATA AAAAATAGTG AGTTGATATG ATGATAAAAA	180
	ATAAAAAGAA ACTACTATTT TTATGTTTGT TAGTCATTTT AATCGCAACT GCTTATATTT	240
45	CGTTTGTAAC CGGTACAATT AAATTGTCAT TTAATGACCT ATTTACAAAA TTTACAACTG	300
	GTAGCAATGA AGCAGTGAT TCAATCATTG ATTTGCGATT GCCACGTATA TTAATTGCAT	360
50	TGATGGTTGG CGCAATGTTA GCAGTTCTTG GAGCATTATT ACAAGCAGCA CTACAAAATC	420
	CTTTGGCAGG GCGAATATCA TTGGCGTTTC CTCAGGTGCA CTTATAATGA GAGCCTTTGT	480
	ATGTTGTTTA TTCCACAATT GTACTTTTAC TTACCATTAT TAAGTTTAT TGGAGGTTTA	540



ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660  
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720  
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780  
 TACTAAATT TAGACGACAT ACAAGCGCGA AtATCGGTTT TAATATTGAT CGTTACAGAT 840  
 10 GGTTAACAGG GTTATTA 857

(2) INFORMATION FOR SEQ ID NO: 887:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 675 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60  
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120  
 25 CATTTCATCAA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180  
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240  
 TTGAAAATGA GGCACCTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300  
 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAAC GCAATGTAGT TATGGTGGTG 360  
 TACTTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTTATGGA 420  
 35 TTGACGGACA TCAAACAGAA ATAGAACTAA CTGCAGTAAA AACGAAAAAG AAAATTGTGA 480  
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540  
 AACAAGGTGG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600  
 40 TAGAATATGA TTTTATAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660  
 CnGATAATnA AACnA 675

(2) INFORMATION FOR SEQ ID NO: 888:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 851 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTG ATGTTTTTCAT 120  
 GATATTTAGG TTTTCTCTTT TCAAGATAAA CCATTAAGTy CTCAATAGAA GGTGTAAGTA 180  
 5 TATTCACTTT AkGACCTAAA ATTTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA 240  
 ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT 300  
 CAATAGCACC ACTCACAAC TGAATATCTTT GTAACAGTTG TTCTTTTGAA CCATTTAAGA 360  
 10 TAACTTCACC GTCACCTAAG TGAATGATAT AATCAGCTAT TTTTCTAAA TCTGAGATAA 420  
 TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA 480  
 15 ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT 540  
 CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTTTCAT TTTCATCCCA GTCGAAAATG 600  
 TTTTATTGA TTTATTGATT GGTAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT 660  
 20 GGTCCCATTT ACGATAAAAA GGGGCAATCA TTTTTCAGG TTGCTTCGTA GTCCATCTCT 720  
 CATTAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA 780  
 GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA 840  
 25 TTAACCTAAT n 851

(2) INFORMATION FOR SEQ ID NO: 889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT 60  
 40 TTGTCAATCG TGCCTGTTGC TGGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC 120  
 CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC 180  
 GCTTGTAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT 240  
 45 AGTCATATCA AAAAATGATT TATATTCGCC TGAATCAnCT AGATAAAATT GGTTGGCTAC 300  
 ATGGTCAGGG TGCTGGCTCA CGGTGCATCA AACGCGnTA ATACTGCCCA GTACCTTTGC 360  
 50 TC 362

(2) INFORMATION FOR SEQ ID NO: 890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

	TTGGTTTATT CCCAAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTTGAAA GTTTAAATAT	60
10	TGTCAAACCC GCTAAAAATA ATACTTTCTG GCCTGTTGCA GGATTTCAG TGTATTAAAC	120
	AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT	180
	ATTAACATGC TGTATGATAC TTCTAGGTGT TTTCGCATTG TTTATATATA TAAATACAAA	240
15	ATTGAAGTTA CATATTTTTG ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC	300
	TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC	360
	AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAAT ATAATAGAAT TTCTTGCTTT	420
20	AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAT	480
	TCATGTTATT TTAAAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC	540
25	TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAGAGGGA	600
	AATAAACAG CCAAAGTTAT AAAAAGTGAA TTAATACTA ATTATATTAT GTTAGCCACG	660
	CTTCAAATAA AANATAATTA GAATAAGGTG GGATTGATAA TCAANGCTAN GCGAATCTAA	720
30	AATCATCAAT AAAAACCCCA AATATAG	747

(2) INFORMATION FOR SEQ ID NO: 891:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 526 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

	ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT	60
45	ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT	120
	TAGCGGAAAT TAGAAAAAAG CATTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA	180
	GACCGGGATA CTTTGAAAAA GCAGTTGTGA ATGAGTGTGA TGCATATGTT TTAAAGAAGC	240
50	GTTCTATAGA AGAATTGGTG GAAACATTA ATAAAGTAAA TAACGGAGAG AAAGAATATA	300
	GCGCCACATT GATGACTTCA TTTTTGTAG ATAAAAACCC ATTAACGCCC AAAGAACAAA	360
55	TTGTATTAAAG GGAAATTGGC AaTGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT	420

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

## (2) INFORMATION FOR SEQ ID NO: 892:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 751 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

TATTTGATGT AAAAGCGAan GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC 60  
 CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG 120  
 ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA 180  
 ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG 240  
 GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA 300  
 AGCATATCGT CTCTCAATTT GGATTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG 360  
 AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA 420  
 TATCAAGTTT AACCGGAATA TTATTATTTG TAACATCATT TTTAGGTATT ACATTCTTGA 480  
 TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACCGAAGAT GAGTTAGAGA 540  
 ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GACTAAAGT 600  
 TTAAAATTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA 660  
 CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA 720  
 TGGGATTATA CATTTGTATG TATGCTGTTT T 751

## (2) INFORMATION FOR SEQ ID NO: 893:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTTGA GCTATTTAAA 60  
 ATCAACAGTA GATGTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC 120  
 AACATCATCA CTAGCGCCAT TCTTATTTGG TGACTTAGAA GCAGATACTG AAACAATTGG 180

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300  
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

(2) INFORMATION FOR SEQ ID NO: 894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTTC 60  
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120  
 TTAAGTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180  
 ATGAGCGCTA CGACTTCTTT AGTTTTTCATT GCGACTATCC TTTCAGTTAT GTTTGGTCGT 240  
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTGTTTGA ATACTTCTTA TTTTATTACT 300  
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTTCA TCGTTTTTAA TTACTTTAAA 360  
 AATTGTATAA CTkAAATATT TAAAATGATA TAAwCACTAA GATTGaTAAT AtTTAATTnT 420  
 TTGGAAAATT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

(2) INFORMATION FOR SEQ ID NO: 895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60  
 AAGCAACAAG TCGTAAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120  
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180  
 TCGTTCAAa TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATTCA 240  
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300  
 TGCTTAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360  
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAGT TAAGAAAAAA GCTAGTGTAC 540  
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAAT GATGTTATCA AGTGCAAAC 599

(2) INFORMATION FOR SEQ ID NO: 896:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1057 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60  
 TTGTTACACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120  
 TAATAAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180  
 ATAAGTAGCA AACTAAAGCT TTGATTAATT CCAGTAGTAA TTGAATAAAG CCAATTACT 240  
 ACAATGGCTA GTATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300  
 TCTATATGGC GTTCACCTTC ATCCAATATT TCCAATCGCT TTTCAGTGTA ATTCTTATCT 360  
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420  
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTTGCTGC AGCGTGCCCT 480  
 ACCACAAAAA TAAGCAATAC TAAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540  
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600  
 TCTTTATCTA CAAGTTGCTT ATACTTCAAT GCACGTCTTT GATTCATCAA AACAATGGCT 660  
 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720  
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAATTAC CTAAAATTCC ACCTATGATA 780  
 CCCCCTACAA GTCCACCCAG TAAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840  
 CCTCCTCAAT AATAAAAACA GTTCCACCG TTTCATTGAA AATGCGAGCA ATTTTTATTG 900  
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960  
 CGCCCGCTTG TTTAGCAAGT TGCGTTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020  
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

(2) INFORMATION FOR SEQ ID NO: 897:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 336 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

5 AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA 60  
 TTTCAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT 120  
 GAnCTGCATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTAA 180  
 10 AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG 240  
 AATGGTACGA AAAAATTTGT AAAGTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA 300  
 GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC 336

## (2) INFORMATION FOR SEQ ID NO: 898:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

25 TGnTGnTTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC 60  
 AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT 120  
 30 CATATTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTACTTTA TTTTATTCTT 180  
 ATGTTTAATA GCTGCAGTAA ATTTCTGATT AGCAGGTATA CGACACACGG CAATTTATAA 240  
 TAAAACATCT AAAGTGACAC AAAGTATAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG 300  
 35 GG 302

## (2) INFORMATION FOR SEQ ID NO: 899:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTTGGT 60  
 50 CAATATGCGA TGTTATTCTT AGCGCCGACT GGACTTGTTA TGGCCCACT ACAAATGTTA 120  
 AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT 180

TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TGTAGAAATA CTAAACTAAG 300  
 CGAGGTGCAT TATTATTTTT GATTAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360  
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTAAAAA TTTGTTTTTA ATGTAATGTT 420  
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

## (2) INFORMATION FOR SEQ ID NO: 900:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

CTTTATTGGT AACTCTCTAT aATAtTTaA CATTTTTACG CTATCGTGCA AACGCAACCa 60  
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120  
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCTTACC ATTTAAATCT AATTCCGTAT 180  
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTTCTT AGTTAAATGA GACTGTTTTG 240  
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300  
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGGCGA AGAAGGAATT GGCACAATAT 360  
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420  
 CTTTCAAAAA TTTATACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480  
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540  
 35 CTTTCATCTTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600  
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660  
 TATAAATGGT TATATTTTCA TATAACTTAG CACCACAACCT CAAACAATTA TTCATCAATC 720  
 40 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780  
 TTCATACTTA CCCCTTnCAT GAAAAACAA TACTTTTTCC A 821

## (2) INFORMATION FOR SEQ ID NO: 901:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60  
 TAACTAAAAA TCCTAATATT GAAAAACAA AGCCATTTAA AACATAACCT AGTATATTCC 120  
 5 ATGTATGATT GTAACCTATT TGCCAGTTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180  
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCTCTG ATGCGTGAAC AATTCAGCAA 240  
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300  
 10 CTCGACGnCA TCAATGTTAA TCCGGACCTT ACTAATGCAT ACCTATAAG 349

## (2) INFORMATION FOR SEQ ID NO: 902:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTCGC 60  
 25 TAAAATCGAC GGCCTTGTTA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120  
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGT 180  
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240  
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300  
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360  
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

## (2) INFORMATION FOR SEQ ID NO: 903:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60  
 TTGGTTAAAA CAAAATATCA TCAGTTATTT GGACGATGTT AGTTTTACGA GATTAGATTT 120  
 50 GGCTTTTGAT TTTGAATTG ATTTAAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180  
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGTnCGAATA 240

GATTCACATT CTATGCGGTG GAATTGATTA AACG

334

(2) INFORMATION FOR SEQ ID NO: 904:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG ACACTGTTTC AAATGAAACA ACAGTGTGTA TTTTAGAGGC AATGAAACTA 60  
 TTTAATGAAA TTCAAGCAGA AATTTTCAGGT GAAATTGTTG AAATCTTAGT AGAAGACGGA 120  
 CAAATGGTAG AGTATGGCCA ACCGTTATTT AAGGTGAAAT AATGAAAAAG GTTTAATTGC 180  
 AAACCGCGGT GANTCGCAGT TAGGATTATT CGCGCTTGTC GTGATTTAGG CATCCAAACT 240  
 GTTGCATCTT TCTGAGGGGA TAAAGATCGC TACATCTCAA ATGCTGATGA GGCATATnCG 300  
 TGGGCCnCTT GTCTAAGGTC ATATTTAATA TCCG 334

(2) INFORMATION FOR SEQ ID NO: 905:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT AATTCTTnAC CGTCAATTGA CCTTTATGCA GATTTAATAT TCCTAAAACG 60  
 TATAACTCTT CTAATGATAA TTGACACATA TTAAATAAC ACTTTAGATT CCGCAATAAT 120  
 TCTTGTGACG ACAATAAATA CGATACATAG TCACAATAA AATCAAATGT ATATTGACCA 180  
 AAATAACGTT CAATATAGTC ACTAAGCTCA TTATTCATAT ATTCTATTTn ATCTATATGC 240  
 ATTTTATTAA TCGAAATAGT CAATTTACGT TGATCCCTTT GATCTCTTCC TTTCAATAGC 300  
 CATTGATGAT TGnTAAATA ACTTAACATT TGAAGAAGGG CCATCTTAGA TTGGATTCT 360  
 TTCATTnTTA ATAACTATC TATTGAAGCG CTATTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 906:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5	TACATTTTTC AATTTATGGC AAAATnCACa ATTTTCATCG AAATATTTTG TAnAnAATCA	60
	TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAACGAT ATCTAAGTTT AAATATTAGA	120
	TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTCTAA GCAAAAGTTA	180
10	AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTTT AATGTTTAAA	240
	AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA	300
	ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaaC AAATGctATG AACAAAATGA	360
15	CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA	420
	AAATATTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTGTC	480
	GTTCAAATCT TAATTGTTTCG AAaCGtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA	540
20	TTTAAAAGTA AATAAGTTTA CGGAaTATCT TGTCCGaTAA TAGCGGTGTA AatGTCAAAC	600
	CACGACTGAT CATcTAAAT AAGTKGTAGC CctTCGATTG CTTGATCAAT ACGCTTTAAC	660
	TGACTTGTTT CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT	720
25	CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACCT TCATAATACG	780
	TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT	840
30	GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTAAC TATCAACGTG	900
	ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG	960
	ATTTAACAAT TGGTATTGTG AATGATTAAA ATTGACACC CCGAATGACT TCAACTTACC	1020
35	TTGTTTAAACA AGTTTAGTTA ATGCATCAGC AACTTGTTCT GGaTCCATCA ATGGTGaAgG	1080
	ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAATG ACTGTTCAAC	1140
	AGATTTACAG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG	1200
40	CTTAGAAGGC AAAATGATAC CACATTTCTG AACAATTTGA ATTTTATTTT TTAATTCGGG	1260
	TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC	1320
	ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCATTT ATAAAATAAT TTAACTCTTT	1380
45	CGCAGTCATC TTCCATTCAT TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC	1440
	ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC	1478

## (2) INFORMATION FOR SEQ ID NO: 907:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

	TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA	60
10	AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG	120
	CTTAAGAATG AaATTATACG AAAGTATGAT TTAAAACCTT CAATTATCTC AAATTCGATA	180
	AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA	240
15	GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAAAA TGGAACATGA TGTTTTAAAG	300
	CAAATTTTAA AGTTGATTTA GAAACTGAAC TTTTAAAGA TACATTACTT GAAGATTCTA	360
	ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT	420
20	AAATTTATTT AATTTCAATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA	480
	GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTTACAC ATACATGAAC	540
	TAT	543

25

(2) INFORMATION FOR SEQ ID NO: 908:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 751 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

	TTTnCGGTnG AACATGATTn CGATATTACT TCTAAAACGA TTCAACCAAA ACCAGGAGAA	60
	AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA	120
40	GATCCAGAAG TTGCAAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAAACTT	180
	GGTTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTTG	240
	AAGCAATTAG ATGAGAACTT TGGTGTTATT GAACAACCAA CTTTAAAATT CGAATTGTTC	300
45	TATTTTGACA TATTTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA	360
	GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT	420
	TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA	480
50	AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA	540
	GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTTGT TAACATTATT AGTGTTACCC	600

55

TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATT C TATGCAAAAT 720  
 GAAACACCTC ATAAATATAT TTTAAGGATT A 751

(2) INFORMATION FOR SEQ ID NO: 909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCACTCT AATTTAAAAG GAAGTTAATT ACAAATTAA AAAATCATGC 60  
 ATCGTGTCAT TTAGATATTG AAAAAGATGA GTCAAATTTG TTTCATATAT TTTCCAATAA 120  
 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180  
 ATAATATGAT TAAAAATGAT GAATGCCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240  
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300  
 AACTCTATAT AGAATGTTTCG TTTTATTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360  
 TTAAATATGG nATTCCGGTC GGCACACGGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1022 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60  
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120  
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180  
 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240  
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300  
 TGACGATTTT CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360  
 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGkAaTT TAATGTGcGk ATATCTATAG 420  
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAC 480

GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600  
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660  
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TCGACAATT TGTATTAAAG 720  
 GACGTAGAAA ATTATCGATT ATACTTTTTG TTATCGCGAT AATTGTAAGT TTGATGGCTC 780  
 TTAATTTAAT TGCAATTGTC TTATGGGTTA TCGTGATGAT TATGTTGATT TCTAAAAAG 840  
 10 AATCAAAAGA AACAACACAT AAGGACGATG AGTATATTTA TCATTAATAT GTTCATAGCA 900  
 AAAGAAAAAC CATTAAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960  
 15 TTTTATTTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAAATA 1020  
 CT 1022

## (2) INFORMATION FOR SEQ ID NO: 911:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

GGTACTTTAT TTTTATTTTT GGTCTTAGTG ATTTTACAT TATTACATA TAAAGCGCCT 60  
 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120  
 AGCATTTAAT AAATATGTnG GTGGCGAGTA TTCGGTATTA AATTTT TAGA AGAGCTAGGA 180  
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATT A GCTATCGGTG 240  
 TGTCAACAGT ATATGCATTA GTTATAGCAG CCGC 274

## (2) INFORMATION FOR SEQ ID NO: 912:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 679 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

CTTTAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60  
 GATAAATCTA GTTCCTCATT TTCCTTTTTA TACTGTCTTC TTTTATCGGC ATTTTCTCTT 120  
 TCTATAATAA ATTGTTGTAA TTTTAAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

TTGTTGTAAT TAACATATAT TTAAGTTAGTT ATGCACCATT TATTCCGCAT TTCACAAATC 300  
 CACCTATAAT ACAAACTATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360  
 5 TGTTCGAC ACTTTAATGT GCCTACTATC CAAAAAGTT ACTCATAACA AATTGCGCAT 420  
 TTTAATAAAT GTAGCAATGC CATTGTCATG CTGCAAAAT ACTCGTATTC ATATTTATGT 480  
 10 TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540  
 AATnTTATAT ATAAATCTT AAGATTCAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600  
 GATGTTTTAA CAATAGAACA TTAAACAAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660  
 15 GTATCATTTA AGCTGAAAC 679

## (2) INFORMATION FOR SEQ ID NO: 913:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTTCAAATT CTAATGCAGA TGCACCACTA ACCATACCAT 60  
 30 ATATAAAGAA AAAGACCACG AAAGnAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120  
 CATTGGAGTT TTCAGCGCCA AATTTAAATG TCAATGsGAA AATGATAGAG TATGCCCTA 180  
 TGATACCAA ACTCATTAAA CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240  
 35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300  
 ATGACTTAAT ATAATCACTA CGTTTAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360  
 AGTCTTTTTT aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420  
 40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480  
 AATAAATATA TGTTTGCTT CTCGTTGCAT AAAAATACT TAGGAACATA CCTTTCATTA 540  
 45 TACTTCACCT CGCATTATGA TTTT 564

## (2) INFORMATION FOR SEQ ID NO: 914:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60  
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAACTAA AGATGCAAGT 120  
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180  
 AAACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240  
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300  
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTTAACAA 360  
 AAAGAAGCTA AATTTGAAAA TGGTGTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420  
 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480  
 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATaG 540  
 15 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600  
 CAAACTAGTA ATTAAGAnTT CAAAAACAAC AAATGCTAAn TCC 643  
 20

(2) INFORMATION FOR SEQ ID NO: 915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAAG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60  
 35 ATAAAGGGCA ATCACATGGT GGTTCCTATT GGAAGTTAAT AAATAACAAA GGAAAAAGAA 120  
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180  
 TTTGATATAA ATAATTTGGA TATAAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240  
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAAC TATCAATAAT 300  
 ACTTATTTTT TAGCTGTATA TGATAATGCA ATAAACATTT TTGAAGATTT GTTTtCGCCT 360  
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400  
 45

(2) INFORMATION FOR SEQ ID NO: 916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60  
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120  
 GGATTTGCGA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180  
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240  
 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAWAC ACAATCCTAT 300  
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360  
 AGGATTACAG ATTAGCGCAG AAAGTCCAA AGAACATATA 400

(2) INFORMATION FOR SEQ ID NO: 917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAATGCG 60  
 TGTATCTGAA TTTTAAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120  
 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180  
 TGCAGACTTA GGTGTTTGTA TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240  
 AGTACCGGCG TTCGTTACGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAGAG 300  
 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360  
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

(2) INFORMATION FOR SEQ ID NO: 918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

GTCTCCAGCC ATTWCACCAC ACATACCTGT CCATTTACCT TCTTTATGTG ACGCTTCAAT 60  
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACAG 120  
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTAAA TCATTTGTAC CGATACTGAA 180

5 GATTCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC 300  
 TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTAAATT GTTGCAACCA TTGGGAACAT 360  
 10 GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT 420  
 ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACCT AAGAATGGAT TCATTTCTTC 480  
 AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC 540  
 ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT 600  
 AGGCATTTGG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC 660  
 15 ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC 720  
 GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTTCTTGTC 780  
 AGCAAAATAA CGCTCACGTT TATCTTGATA AGCGATTAACT TCATCTTCAG TTGGATTAACT 840  
 20 GATTACATCA CCATTTAATC CATCTACGAT AATCATGTGC CCTTGTTTAA CTTCTTGAGT 900  
 AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG 960  
 aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTTGACG AATTCTTTAT TTAATTGAGC 1020  
 25 AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG 1080  
 ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC 1140  
 30 AGCCGCACGT TCTTTCATGT ATTCGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT 1200  
 TGTnACATCC GCTTAATGTG 1220

## (2) INFORMATION FOR SEQ ID NO: 919:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45 TTAGATTGAC TGCAAATGCC GACTCAAAAG AACAAAGCACA ATCATTGATT CAACCTGTTA 60  
 AACAAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG 120  
 AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTGTGAAT ATATGATGGT ATTACTAATG 180  
 50 GTGCTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTTCTAAAG GGTATGATTA 240  
 ATCACAATGA AAACCTTTGt GATATTAATa AACCTATTGA GCaGCAATTA AAAGATGCAG 300  
 TGCAATTTGT TAATA 315  
 55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

ACTTTGTAAA CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT 60  
 TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCCT GTGACGGTTA ATATCGCAAA 120  
 GAATATACCT GAGAATAAAA CGCCTGTAA ACCAACTTGC CAAGGAATAC CCATGGTTAA 180  
 CACAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGcTAACG CAATTGGATA 240  
 TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA 300  
 AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA 360  
 AACTTGCGGG TTAAGTCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA 420  
 GATTTCTCTT TTA 433

(2) INFORMATION FOR SEQ ID NO: 921:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

CTATTTTATT TGTATAGCGC TTGATGTAAA GTTATTTTAG CTGTCATACT ATGTGCTAAA 60  
 CCAAATTCAG TTGTGTCATA TCTTCGCTTT TTTGTCACTG TTATAATAGG TATAATCGGA 120  
 TATAATGAAA AGGkGAGGGA GGATTCAAAA TCGTAGGTT ATTATATTCA TTTCTTTTTT 180  
 ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT 240  
 TTAAGGTGAC AACACAATTA TCACTTGTAC ACACACATAC ACTTATTTTA GGTATGTTTA 300  
 TGkTTTTAAT ATTATTACCA TTGGaGAmGT TATTTAAATT ATCAAGTTAC TACTTATTTA 360  
 ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA 420  
 AGGATTCTTC CAAGTCACT 439

(2) INFORMATION FOR SEQ ID NO: 922:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

	GTAATATCTA TATACGTATA TTTAAATGAT ATATCTGGGT ATTTTCTTTT TAATAGCGGC	60
10	TGTAGCCAGT CATAAATATC TtTCGaTGTT GGCGCATTAA CGCAACTTGC ACATATAACA	120
	TCTGCCCCAT AAACACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA	180
	GATTTTTATT AACTATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA	240
15	AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT	300
	ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG	360
	GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC	420
20	AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG	474

(2) INFORMATION FOR SEQ ID NO: 923:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 554 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

	TCAACTTGTC AAGAAAATTT ATTAACCTTA GTAACCTCTC CAACAAAACC TTGTGATGTC	60
35	ATCACAGCCA TATTTGAAGT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTC	120
	ATCCACTGAT CCGGATTTCT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA	180
	TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA	240
40	GATTCTAACT GGCTAATCTT ATTTTITAGAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC	300
	CCAATCGTAC CAGCAACAAA ATTAACCTGGA TAACTCACAA CTCGTTGTCC AAAAGACACA	360
45	GAATCACCTA TATATTGTTC AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT	420
	AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC	480
	TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATThATAT	540
50	TACTCCCATT ATGA	554

(2) INFORMATION FOR SEQ ID NO: 924:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 575 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

	ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC	60
10	TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA	120
	TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC	180
	AACGATTTCA TTTGTTGTTT CTAAAGGTAA AAAAAGTGAC TCATCAGATG TCAAAACGAC	240
15	AACTGAATCG GTAGATGTAC CATACTACTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT	300
	TTATATTAAA GATAAAGATA ATGACGGTTC AACTGAAAAA GGTAGTTTCG ATATTACTAG	360
	TGATCAACGT ATAGACATTC CTTTAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT	420
20	TAAAGTTGAC GGTAAGAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA	480
	ATTGAAGTAA ATGTACCGAG GTTCTATTTT GGAAGTCTCG GTATTTTTTAT GTTGGAGATT	540
25	GCGGTAGTTT TAAATGcNT CnTGTCnTCA TATAC	575

(2) INFORMATION FOR SEQ ID NO: 925:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 307 base pairs
30	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

	AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA	60
	GTGATTACAC CTATTAAACC ATATAAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT	120
40	TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnc	180
	GTTTATAGAT CnCATTGGGG GGATCCAAAG CTTAAAAAGA TAAAGTGAC TACCAGATAT	240
45	AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT	300
	TTGCTAA	307

(2) INFORMATION FOR SEQ ID NO: 926:

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(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTCAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60  
TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120  
TAAAATCACA AATTCATACA AAAAAGACGC CTCCATAAG TTTAGTCACC AAATGGAAGA 180  
10 CGTCTCGTAA TTAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240  
CGTGCATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTTACAT CATTCCTGGC 300  
ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360  
15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

## (2) INFORMATION FOR SEQ ID NO: 927:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 809 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

TTTAGGTGGT TTTAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60  
30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120  
TTGGTTGGGC TATATTCGTT TCGGTACTTA TTTCAACACC GTTTTTATAA ACTCGGAAGC 180  
TATCATAAAC AATTcTGTCT CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTTCAG 240  
35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300  
TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360  
AATTTTCAA TGTATACTTT CTTTGTCTC CGCCTGCATG CCAATCAATA TTAAATCAA 420  
40 ACGACCACAA TCCAACCTTT TTGTTTTCTT CTAACCTAG GCTTGTTCCA ATACTTTCAC 480  
CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAAGA AACTTTATTA CCTTTTGT 540  
TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600  
45 GATCGTGTCT TGAATATTCG TAATCCGGGA AGTTGTTTTT ATCTAATTTT ACGTAATCAT 660  
CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTTCTTT TCTTCTGATn TCTCGCAAAT 720  
50 ACATAGGTTT TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780  
AACGATTTTT AACTTTACAA AAACAAGGA 809

## (2) INFORMATION FOR SEQ ID NO: 928:

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- (A) LENGTH: 1016 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

10	nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAACtCAA CTAATGATGC	60
	TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAATT TAGCAGATCA	120
	AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC	180
15	TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG	240
	TGATGTGAAG AAAGCAGTTG TCAGAATTAA AGATGGTGGT CCTAGAGATT ACTATACTTT	300
	TGACTTAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA	360
20	AATCGACTCG ATTACTTGGT ATTAAAAAAC ATACTGAATT AAATAGTTGT ACGCCAAACG	420
	TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTTTATTT TAAGTAACTT CCAATTTATT	480
25	TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGGTTGCC ACTATATCCG	540
	TTACAATTTT TATGATTGTT AATACATTCG ATTTCTTTT CACAATAGCC ACCTCGCTTG	600
	TTCAAAACAT AAACAACATAT TGCATTCACT TTTAAGTAAT TATTTATATT ATTTATCCCA	660
30	ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA	720
	AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAC	780
	TAGATCGATT TGTCTTTGTA ATTTTTCTT TTCATAACTG TGTTGGAAAT GAATTAAATT	840
35	AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC	900
	AGCTTTTTGT GCATCCACAA CTTTTtATT TACTTGWTTT kTAAAGTTTG TTGATACTGA	960
40	TCATATTTTT TAGCAGCTTC ACCGTTnTTA GTTGTGCATG AGATCACCGG CAACCG	1016

## (2) INFORMATION FOR SEQ ID NO: 929:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

50	AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTTGTG ACTGTATTCA	60
	AAATGCAGGT ATTGATTTAG AAGTATTTAA AGACGACTTA CAAAAAGTA AACTAACCGA	120

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CGTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA 240  
 TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC 300  
 5 TCCTAAATTA GAAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC 360  
 TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA 400

(2) INFORMATION FOR SEQ ID NO: 930:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20 TATTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA 60  
 CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTCATA 120  
 GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA 180  
 25 TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTGTGACA 240  
 GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT 300  
 TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG 360  
 30 ACATGGnGTG TCAGGCATAn GGCTCATACT GTGCAATATG 400

(2) INFORMATION FOR SEQ ID NO: 931:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT 60  
 45 GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTTT AATTTGTAGT 120  
 AAACGTAAAC CAGTTACGGC AAATTcTCTG GCAATaATAA TGATTGCTAC TACAGAATTT 180  
 GTTAGTCCTA GTTGCAACAAG TACAATTAAA GCACTTGCAA CTAATAATTT ATCCGCTAAT 240  
 50 GGATCCAAAA ATTTCCCAT ATTTGTAAT AAATTCCATT TTCTAGCTAA ATAACCATCA 300  
 ACAAATCGC TAAGGGAAGC CAATATAAAA ATAAACCAC TGATTAATAA CTCAATTCTT 360



ATAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480  
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540  
 5 ACC 543

## (2) INFORMATION FOR SEQ ID NO: 932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAGAATGG GAGCAAGTAT TTACAATAGC 60  
 20 TTATGTAAC TATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120  
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA 180  
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAACTTTTA AAGAAGAAGG 240  
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300  
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360  
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 759 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60  
 TTTTGAGCCT TTTTTTGAAA ATTAACATTT TAACCTTTTT GATTTTACAA CAAATTATAG 120  
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTGTGT TAAAgyTTT TATGTTTAGA 180  
 TTGTTATATT ACTATGTATT CTTAAATTTG TTTAAAAAAT TAATGCTTTA AATTGATGTA 240  
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300  
 50 AAGGGAGTCA AATTTTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTTAAGAG 360  
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATAACTT ATATCATTTT TATTAAAATA 420

ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540  
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG AAATTAAAAA 600  
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAT 660  
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAAA ATATCGATGT 720  
 GGTCATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759

(2) INFORMATION FOR SEQ ID NO: 934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGGAAATCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60  
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA TTCATGGTTT 120  
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGA GCTTGAACCA 180  
 TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240  
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTA TATGTATAAA 300  
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAGnTT 360  
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

(2) INFORMATION FOR SEQ ID NO: 935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACTG ACTAAGAAAA 60  
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120  
 GAAACAACCTT GTAATGTTAA TTTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAAT 180  
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAACTTGAC CGCGGTACAC CTAACGCTCG 240  
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAAATCACA GCAGTTTTCA 300

## (2) INFORMATION FOR SEQ ID NO: 936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGACTTGCAT CAGTTCTCTT 60  
 TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA 120  
 TTCGTTTAGC ATATCTTCTT TTAAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG 180  
 ATACATATTA TCTTCAGAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT 240  
 TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTTGGCTTAA 300  
 AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTTAG TACGATACAC 360  
 TTTAATTGGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC 420  
 AGTACTTGGG CGCTCAACTT TAATAGAATT TAATACGCGC ATATCTTCTA ATAATTTAAA 480  
 AAGTTGTTGG ATAAAATTTA GGGcGTTTAA AAGTTTATC TTGtACTACT TCATTTACAA 540  
 TTTGtACATC CaTCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTTAAACCAG 600  
 CCATTTGAT ATGGCTTGG 619

## (2) INFORMATION FOR SEQ ID NO: 937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC 60  
 TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTATG CGTGGCGAAC CAGCAATCTA 120  
 TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTTAGTTA TCGAACTACC 180  
 AGCAACTGCC AGTtTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGcGGA 240  
 TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGAtATCA AAACATTAAA 300  
 rCmATTAGCA CACAGCATTa ATGaAATTGA mCAATCTGaA TCCTTTTCAC aAAAAGTrAA 360

AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAAA 480  
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540  
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600  
 GCATCATGTG GTACC 615

## (2) INFORMATION FOR SEQ ID NO: 938:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAAATAT CATTCCGGTTA TCATAAAAGA CGCACAAGCA 60  
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTTATC GCTTTGAACC ATTAGTATAA 120  
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180  
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAT GAAAAAGATT GATAATATAA 240  
 ATGTGAAAAA GTAAGTATAC CCGTAAACTA AAGTATTCAC GGTGAGAGGT GTCATGTCA 300  
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAAATATGT CCATACAACA CCATGTAGAT 360  
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 939:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60  
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120  
 GGAACAGACC ATGGTGCAGT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATT 180  
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240  
 50 TCAATCCAAA GTCGTTTAGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300  
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

## (2) INFORMATION FOR SEQ ID NO: 940:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC	CATTGATACC	AATCATTTAC	ATCACTGTCA	TACGAACATA	TATTTAAATA	60
GAAAAAAATT	ATTTTAAAGA	TTATAACTAC	TCTTAATCAT	TTTAGTGAAT	TAAAAAAAGT	120
AGTGCAAAAA	GCAAAATATA	CTTTATACAC	TACAAATCAT	TTATTTATAA	TAAAGTTTCA	180
CCAAAAAATG	TTCCAATAA	TGAAACCGCT	TGTTTCAGCAG	TATGATTATn	ACTGTCAATC	240
AATGGATTTA	CTTCAACTAA	ATCCATTGAG	GAAATTAAAT	GTGATTGATG	CAGTAATTCC	300
AATGCnAAAT	GGCTTTCTCT	ATnACTAAG				329

## (2) INFORMATION FOR SEQ ID NO: 941:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA	CCAATTTATT	TGAAGAAAAA	TCCGAAC TTC	AAATTTCCGA	TGAAGCAAGA	60
TATACCGGTT	ATTATGATTG	GACCAGGTAC	TGGAATTGCT	CCTTTTAGAG	CATATTTACA	120
AGAACGTGAA	GAACTTGGTA	TGACTGGAAA	AACATGGTTG	TTCTTTGGTG	ATCAACACCG	180
TAGTTCTGAC	TTTTTATATG	AAGAAGAAAT	AGAAGAATGG	CnTGAAAATG	GAAACTAACA	240
CGCGTAGATT	AGCATTTCCA	AGAGnCCAGA	CACAAGATAT	GACAGCCnCG	ATATGGAGAA	300
GTAACGTTCC	ATGAT					315

## (2) INFORMATION FOR SEQ ID NO: 942:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 699 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

5 TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCACTTTCCT TTTTATACCT 60  
 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120  
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180  
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCATTAATG GATCCAACTT ATCAAGAGAT 240  
 10 GGCGCATCTT TAATTCCTTT CATTTTCTTC TCTATTTCTT CATATTTCTC TAAATCTGGA 300  
 TCTTTCTCTT CTTCGGATTC TTTTTTTACA GTTCTTGTT TTGATTCTTC TGATTTCTTT 360  
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420  
 15 AGTAAACATC CCAGTGTCTT TTTCATAAAC TTTCTCCTCT TAAGTTATTT TGTTTGAATC 480  
 AAATAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540  
 20 TATTTTTAAA TACTTTAAWT GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600  
 TTA AACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAAAATTCGC 660  
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

## (2) INFORMATION FOR SEQ ID NO: 943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

35 CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAAACGC CAAGAATGAT 60  
 CATAAATGGC ACTTCTAAAC CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTTCATT 120  
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180  
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240  
 AGCAATTTTT TCAACATGTT GTTGCGTACT AATAGGGTGT TTAATGTTTA AATCCTTATA 300  
 45 GANAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360  
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60  
 TTGCTGGTAT TGAAGATTTC GGCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120  
 TTGTTATATT GGATGTTCAA TTACCTAmAT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180  
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240  
 TGATGAGTAT GGAACCTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300  
 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360  
 15 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAAGGTG 420  
 ATCAGACGAT TTCCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480  
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTTG 540  
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

## (2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

35 CCGAGnCCAC CGTTCCAAAG TCCATTTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60  
 TTTTGAATTT ATTAATAATG CTATTTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120  
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180  
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240  
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300  
 ACGGTATTAT TATTACTAGT CTTTATATCA GGaTGtGGTA ATGrTaATA TGTGAAAGAA 360  
 45 ATaGATGAAG CAGTTAAAaT TCAAAATCaA AAACAAGAAC ACTTGCCCAA AAAAGGCAAC 420  
 GGTGATCGTG TTGATCATTT TGAACGCAAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480  
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540  
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTGAG ACGATATTAT 600  
 CAACAACATG ATGCGGATTA TCATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

	GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT	780
	GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT	840
5	AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTTG TCAATTTAGC TTTCTTAGGT	900
	AAAGACTCAA TTGTTGGTTC GCGTGCGAGT CATGCAGTAT TGATGTATGC ACCTAAATCA	960
	TTTTTAGATT TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA	1020
10	ACAAAAGAAC TATTAGATAA ACATATTAAA CAACTGCATT TAGATAAAGA GACGGAAAAT	1080
	AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT	1140
	AAAAAAATAG CGAAAGATAA TCATATAAAa aCGACACCAA CTGCATTTAT TAATGGCGAG	1200
15	AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A	1241

## (2) INFORMATION FOR SEQ ID NO: 946:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1057 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

	TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCAAGCTGA TATTATCTGT	60
30	TGCAATTTTA TGTGACGAAC TGTGCACTT AATTTGATAA ATCAACAAAT ACAAAAAATC	120
	TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG	180
	ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTTAC aTCAAAATTT	240
35	TGAAGTAGCG TATCaATCTT TGaATCaTCa ATATATACct TATGTAAATT TTTCaTATAC	300
	ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG	360
40	TGTCCTTGAC CATTTAAATC AAGCATTAAG TGATCACTCG AAGCGCCTAA AATATTGATA	420
	TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTAYCTA AATAACCAAT ATCTACAATA	480
	GCTTGTAAGA ATGATTCATG CGTTTGTGTA TTAACCTGAG GTTTAATTTT TAAAATCTCA	540
45	GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTTGATTTGT CGTTGTATCA	600
	ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTTA TTTTACCCAA ATCATTATAT	660
	AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAAATAA TTTTCAATCG ATATCCTATT	720
50	TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGCGCGA	780
	TCAGATTTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA	840



CAATCTACCA TTAATAAAAT CTTATGTTTT TTTCCTAAAA CTTCTGgCTA CTTCATTTTAT 960  
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020  
 5 TCAATATCCT GGAAAAhCCC TTTTTTTGGG CAGGGCG 1057

(2) INFORMATION FOR SEQ ID NO: 947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 649 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60  
 20 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGACTGTAA ATATAATCAA 120  
 AATGGCGAAT TAACAATGGA TGGTATTAGT TAAAAACGA TTGCACAAAG CTTTGGTACA 180  
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TCGCCCGTTA CCATCGCGCA 240  
 25 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCAAT 300  
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360  
 TTATATACAG CTTTAGAAGC AGGTTTTGAA CCGAGTCGCA TCCATTTCCA TGGAACAAT 420  
 30 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAaATAATA TCGGTTATTT TGTATAGAT 480  
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATtA 540  
 35 CcGAGTTAAT CCcAGGTgT TGrAAGCcAC mTrCaCaCgA aTTTATTCaA ACyGGGcaaG 600  
 AAgGATAGGT TAAAGTTTTG GGATTAAhCC nhTTTCCCAT TAATGGGCC 649

(2) INFORMATION FOR SEQ ID NO: 948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60  
 50 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120  
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC aTTACGGATA 180

AAAACTACTA TATAAATGAA TCTGATGCTC AGAGTGTTTCG TCAATTTGaa AATGrAATTC 300  
 aaAGTTTAAT TTCTGTATAT GATGATATTT TAAAAGAnAT GTCTAAATCT GCTGTGCGAT 360  
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTACAGTT ATTAATGACC 420  
 AACAAGAAAA GCTACAAAAT CATCTGATTC AATTGCGTGA AGATGnGCAG AA 472

## (2) INFORMATION FOR SEQ ID NO: 949:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

20 AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60  
 AAACGTTTCA ATTTTGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120  
 GATGTATCAG ACAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACTAT 180  
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGAATGACG AACCATATAA CAATGAGTTC 240  
 AAGAAAGATG ATCGAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300  
 GTGTCAGGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360  
 30 TGTGTACnG ATCTCTAATA GAATCTCAGA TGCCCGGCAA 400

## (2) INFORMATION FOR SEQ ID NO: 950:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 556 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTTCTTTA AAATGACCAA ACTGCAACGG 60  
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTTC AACTTAGTCA TCACATCATA 120  
 ATCCAAAGAC ATCACACGAT ATTGATGTTC AACACCATGC TTTTTCAAAA TATCAATAAC 180  
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240  
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTCATGTCC 300  
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTCAGAAA TATTTTTATT 360

CATAATTGTA TCTAACTCAA CGTATTCGAC ATTCGCTTTT GCAGCAGCTT TCAATGACGG 480  
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540  
 5 TTGATAGTAT TATTGG 556

## (2) INFORMATION FOR SEQ ID NO: 951:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60  
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120  
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180  
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240  
 25 AAATAATTAA TGTTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAAGGG AATATCAATA 300  
 AATTGCGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGgAATAAT ATTCCATATT 360  
 GaAAAAGGCa AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTTTCATTC TTAATAGATA 420  
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

## (2) INFORMATION FOR SEQ ID NO: 952:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 730 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTTG CTGCTCCTT TCACTTTTTA AGAGTAAAAA ATAACCTGAA 60  
 45 ACATAACTTT AACATCCAAG TTTCAGGTTA GTGTAATGTA AATGATTTAC TTTGTnTAT 120  
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180  
 GAGAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTnTATC TTCTTCTGTA 240  
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300  
 AGTACAACAA TGTCACGTTT TACTAACCAG CGTAAATATA CTTGTGCAAT TGATTTGTTG 360

AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTTGAA GTGCTGCAAC TTGTTCTTCT 480  
 TGTGTGATGGA ATGGATTAAT TTCTATTGG TCACTTGTG GTTGAATTG ATTGTGAATA 540  
 5 CCTAAATCTA CAATTCGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAaTTTTACC 600  
 ATTTTCTTTT AACTCCTCCA ATGCACGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660  
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720  
 10 GGATCGGTTC 730

## (2) INFORMATION FOR SEQ ID NO: 953:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTAGGAGAT TGATTATTAC 60  
 25 AAATATCCAG TTTTGTGTA CATCTATTTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120  
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180  
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240  
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACCTCAG 300  
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360  
 CTTTAAATAA GTCTAATATT TGCGCTTGAA TCGTGACATC 400

## (2) INFORMATION FOR SEQ ID NO: 954:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60  
 AACATCTGTA TAATTAGGAT CTTCTTTCTC AACATCAAAa ACATATGGTT TTGTTTCAAA 120  
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180  
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

## (2) INFORMATION FOR SEQ ID NO: 955:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

AAACATTTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG 60  
 CGCGCCATCC aTTACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA 120  
 TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC 180  
 TGGCTCAGGA AAAACAAC TG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT 240  
 CGCTTTACTT GcTCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG 300  
 CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT 360  
 TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG CtAGTCATAC 420  
 AAGAAGTGgA CATTACCATT GGATTTTtAA ACCTAAAGAT GtTTATTTAT CGTAGAAGGG 480  
 CCTTTTTTCGC CTTTAGGAAA ATAAGGGTAT TTAC 514

## (2) INFORMATION FOR SEQ ID NO: 956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT 60  
 ACAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA 120  
 ATTGAGCAAT TAAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT 180  
 GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAAC GAGCTAATGA GTTGGATAGC 240  
 AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGATAG CATAATAGTC ATGCTAAGTT 300  
 AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC 360  
 ACAACTGGGA AGTGTAATG TGA CTGTA 388

## (2) INFORMATION FOR SEQ ID NO: 957:

(A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10 AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG 60  
 TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGw GACCACATTG 120  
 TATCGGAAAT TCAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTCA TTTAAAAAAT 180  
 15 TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTTAATCAGT CCAAATAAAG 240  
 GGGAAACCATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAACTTTCT AGAATTATGT 300  
 TAGCGTTAAA AAGTATTTTT GTTAAAtCGa GAGGTCAAAC TGCAATTtTr TTcGATGAGG 360  
 20 TTGaCTCAGG TGTATCtGGr caAGCTGcAC CAnA 394

## (2) INFORMATION FOR SEQ ID NO: 958:

25

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

CCGCCATTTT TTTGATTTC TTTTCAAGT TTTTCACGGT CTTTGAAGA TAGACTATTG 60  
 35 AAATCTTTTG CACCACTATC ATCAAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT 120  
 AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA 180  
 GTGTTATTyT TTACGTCAGA ATCTATATTA TTTTCAAAG TGAATTCATT TTCGTCGCTA 240  
 40 TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGTGCC ATCTACTTTT 300  
 TCTTGATTAT CTAATTTGAT TTTTGATTCA TCATATTCTG TCTTTTACC AAATTCGTAT 360  
 TTATCATTAT ATTTATtATC TTTwTCTTTA GAAGATACGC CTTTAATTGT ATATTTGCGT 420  
 45 TCAGCATACG TGTATTTATC TTGATCGAAA TCAAGTCCGT AATCTAGTTT TAACTTATCG 480  
 TCTTCTAAAG TATTAGTACC TTT 503

50

## (2) INFORMATION FOR SEQ ID NO: 959:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

5 TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG 60  
 TCTATCAACT TGATCGGTTA GGTAGAACGA CAAACTATT AATTGAATTA TCACAATGAT 120  
 TCGATGATAA CGGAATTGAC TTACCAATT AGTAACCTGA ACATTTCCAC GAAAGACCCC 180  
 10 ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA 240  
 CTATGTGAGT GTATAAAATA GACTnAGCAG CCACAAGnCG AGAGGCCGAA AAAAGCGGGC 300  
 GCCCTCT 307

## (2) INFORMATION FOR SEQ ID NO: 960:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

25 ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT 60  
 CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT 120  
 30 TAGTAATTTT TAGTCCATAA TTA CTCTCTAA TCCTAACCA n GTCnGCnAAA TTTCCTCCAT 180  
 GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA 240  
 CACGTTTATC ACTAAAATCA TATGCATAAT AATGCACTTC ATCATCATTA CTCAAAGGTT 300  
 35 TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT 360  
 CAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT 400

## (2) INFORMATION FOR SEQ ID NO: 961:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

50 ACAATTAGTT ATACCCAAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAATCT 60  
 GTTAAATGGG GTGTTAAAGC AAACGAATTT GTTACGCCTG ATGGAAAAAA ATCTGCGCAT 120

GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240  
 AACTATCAC ATGAAAAAGG TyCagTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300  
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCh GGAAGGAAGC 360  
 ATAATGCATT TGGAAATAGG AACCTTGTA<sup>n</sup> TTA<sup>n</sup>GTATGG 400

(2) INFORMATION FOR SEQ ID NO: 962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

20 CTTTTACAAA GACAAATTAG CGGTAATCGG TAA<sup>n</sup>GATCGT TGTTGATCCA GTTGCACTAT 60  
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCCTAC AAGTAATTTA CGTATATCTA 120  
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180  
 25 TGGTGACAAT AAGATTGGTA CACTAAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240  
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300  
 30 TATAACCAGC TATTCAAGGA TGTTACGAAC ATG<sup>n</sup>CACATT GATGAAnCTT GAGATATA 358

(2) INFORMATION FOR SEQ ID NO: 963:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60  
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120  
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAATATTT 180  
 TCAAAACCAT TTTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240  
 50 TGGTTGAAnT GGTTG<sup>n</sup>AT 258

(2) INFORMATION FOR SEQ ID NO: 964:

- (i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 388 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT 60  
 10 CTCTCATGAC AGTGCACGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTAA 120  
 AATCATTTCT ATTATTAATG CTTTAATGAC AACTTATTTA ATTTATTGCA TTAAATGCCC 180  
 TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA 240  
 15 CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT 300  
 TTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT 360  
 TCTTAGCATA CTAGTCGGAA TTATATTC 388

20

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 602 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC 60  
 TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT 120  
 35 GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTAAATAAC 180  
 TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA 240  
 TTAAAACGAT TATATTTATT GTCACCTGTT CAAACGCACT CCTTTTCCAA ATAATAGAAT 300  
 40 TGCTGCTTGC ATGACAACCA TAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC 360  
 TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA 420  
 GAAACGACCA ATATAAATTC CGAATCCATT TAAAAACATT AGcACGaCAA CrATTAAATCT 480  
 45 ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATThAAA TCATCACATA 540  
 AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG 600  
 50 TC 602

(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 744 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

	GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT	60
10	TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAACTTT	120
	TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC	180
	ATGACATTTT TTTGAAACTA GAGAAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG	240
15	AAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT	300
	ATAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGAAAA AGTATAGTTT TTGGGTTGAT	360
	GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTTTT GCAGTCTCAA TTAGCACACT	420
20	TTGTGATGAT AAATGCAATT TCGCATAATA TGrAACGAGT TTGTTAATTG GAACTTTAAG	480
	AATGTAATCG CAATGTAAAA AGACACAATT TGTTTCGAGA TGGTTTGAAG TAGCAGTTTG	540
25	GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG	600
	TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTT CAACATCATT	660
	AACACATCGA CCGAAATTTT ACAATAAACT AATTAAAATT ATGTTGGCAT TTACGCTTAA	720
30	CGGACATCTT AATTAATTTA ATCG	744

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 503 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

	TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTCACGAT	60
45	CCGAAAAAGT CTACGACAAG TGGTTTCCAA AAGTTAGAGC CACAATTGCT AACGAAAATT	120
	AACTGGAAAG TGTTTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT	180
	GCATTTGAAA CATTGTATTC ACTATACACA GCTGACAAGG TAAATTATTC ACCTAAAGAT	240
50	ATTTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTTCCmAACT CTATTTCTTC	300
	GATAAATTTA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AwTATATTCA	360
55	GTTGTTGTCy TAAwAwTawT AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC	420

TTTTCCnAAn ATTGCnGGGG AAG

503

(2) INFORMATION FOR SEQ ID NO: 968:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 465 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

15	TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC	60
	ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGA TTAGAGAAGA	120
	AAATGTTGTA CCAACAGGTG TACCACGTAC TGaTGTA TTTGATGAAG CTTATGCAAC	180
20	ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT	240
	ATTGCGACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAAAT	300
	TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTcMAAAT	360
25	GCATCCGTTT GTAAAAAATa GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC	420
	GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC	465

(2) INFORMATION FOR SEQ ID NO: 969:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

40	AATTCGGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC	60
	AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG	120
	CAACAAGAGT GCCGGATTTA CCAGTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC	180
45	GTAAAGATGA TACAACAACn ATTTACTCAC ACCTATACTC TAAAAGATTn CACACGTCAT	240
	CACAACGGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC	300

(2) INFORMATION FOR SEQ ID NO: 970:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAAC GTCTGCGACC TTGAGCAACA 60  
 ACATGAATGG TCTTCGGTTT CCGTGTTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120  
 TGCACCATTA TGTTCCGGAT CTGCATCGCA GGnATGCTGC TGGATTATCA TCCGATTTTT 180  
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTTACAG TACCTGCTTT GATTGGTGCA 240  
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300  
 TATGTAGGAA GCGGTGCAGC GCAGTTTAAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360  
 15 GATTTAATnA ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

## (2) INFORMATION FOR SEQ ID NO: 971:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAA GCTAGCAATT 60  
 30 ATTCAGAAAT TAAATCGAAG AGTCCTACAG TTAATGACTT ACCTGAACGA GATTTATCnA 120  
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180  
 35 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240  
 TGCAAAGnCT T 251

## (2) INFORMATION FOR SEQ ID NO: 972:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

50 TGAAGCTCTT aATAAATCTT TTCTTGAACA CACACCAACA AAATCGTTAT CTTCATTAAAT 60  
 AATAAATAAT GTACTTACAT CTTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGTT 120  
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300  
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTTAA CAATTTTCGAT 360  
 5 GATTCTGTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GCnC 414

## (2) INFORMATION FOR SEQ ID NO: 973:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60  
 20 TTCGTCTGTt CATAcATATt CGTtACAAaT GAAGGTGTtG AAAaGTAAaTT AAaTaCTTGT 120  
 TTaCCTAAAT CTTTAAaTGT ATCACtTGGA TTACCGTTAA AAAAGTTTTG ATTCTCGAAT 180  
 TGATTGAAGT TCAcATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240  
 25 AGTAGTATTA AAAAAGTTAA AGTAAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300  
 GTGCCTGATA AGGAATCAGG GCAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360  
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420  
 30 TTTGTCCGAA TAGTCAAAAT TTTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480  
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540  
 35 GCTTTTTIATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600  
 TTCACGTGTT CGAACAACGT AATCTTTCTT TTCTAATTTT TTTAGTAATG GkGTCAGTGT 660  
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTTTGATG TTAAGTTTTT CATCATTTTC 720  
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

## (2) INFORMATION FOR SEQ ID NO: 974:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTTAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGGnCAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180  
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240  
 5 nCTTCTATAT CAAATGT 257

(2) INFORMATION FOR SEQ ID NO: 975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60  
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTAaaaaAGT AAGAGGGGGA AATCACGTGA 120  
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180  
 AAGAAGTTAG ACAAGGTAAA ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTCGAAATA 240  
 25 CGATTTCGTAT TTTAAGTCGT AAAACTAAAA ACAACCCTGT GCTCATTGGT GAACCAGGTG 300  
 TTGGTAAAAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360  
 AATCATTATT AGATAAAACT GTTTTTGAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420  
 30 AATATCGTGG TGAATTTGAA GAGAGATTAA A 451

(2) INFORMATION FOR SEQ ID NO: 976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTGCTAAT GGACCATAAG TTTTAAAGAC 60  
 45 ATCTTCACTT TTATAACCAA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120  
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaAATAA 180  
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240  
 50 AATTGAATAA CCTAACTTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300  
 CATGTTAATC CTTCTTTCTA TATTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

TATAACTATG TCATAAACTG AATTGTGTA AATTTTTCAT TATGCAAATT TATTAATAAC 480  
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540  
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

(2) INFORMATION FOR SEQ ID NO: 977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCGAAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60  
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120  
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAAACAAG CATTTGCAGG 180  
 TTTGCCGGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240  
 25 TGGGGGAATT AATTGGATAC CCCAAAAGG AATT 274

(2) INFORMATION FOR SEQ ID NO: 978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTCACTG TCAAACAGTG 60  
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120  
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTAC TCCTAATAAT TCAATAATGA 180  
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTCATA CTTGCCATCC ACCATCTCAA 240  
 45 ATaCATCAAA TTTAGCGTTC GTTTTTGTTG TATTACCTTC TTTGATATAA GGGCCTTGTC 300  
 TATGCACTTT ATAAATTCGA TGATTAAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360  
 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTCAAGT GATGCTTTAC 420  
 50 CAAACAAGGC ATAAGTCATT GCATCAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480  
 TTATTAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTCTTCT TTTAAAAAGG 540

CGTTTTCTAA AATATTTTTT ATCTTTTATG ATTGGATATC CgATAATTCT TTATCAGTTA 660  
 TATGTTTATA AAACATTTTCg ATAATTGACA TGTCaTCTTT TTCACTTATT TCyATAGCAT 720  
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAATn 780  
 GTTTTAAACT CATCATTGGA TCAGTAATAT GAGACATATT TTAAAGTTTA AAATGTAAAA 840  
 TAATTATCGT TATnTTTCAC ATGAACTTnT TCATTAA 877

10 (2) INFORMATION FOR SEQ ID NO: 979:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 624 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTGT CCATTTTAGC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60  
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120  
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180  
 ATTTCTTCCA ATTGCGCAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240  
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300  
 30 ATTCATTATG CCCAAATTTT TAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360  
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420  
 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480  
 35 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGGG CATCTTTATT 540  
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTTAAAAATA 600  
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 457 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTGTCACCT ACGCTAACCA 60



TKGATTCATC AATTTTCAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC 180  
 GTGGCCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA 240  
 5 TGGCACCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGtAATGCAG 300  
 CATTtTGtAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt 360  
 TTAAAtCtKc tAAtAAACTC aCTAAAGTTT TAACATCAGA GATTtTnGCGG TAACCCTTCT 420  
 10 AATTTACAT GTCCTTGAGC TAATAATGTT GCAGGAA 457

## (2) INFORMATION FOR SEQ ID NO: 981:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 997 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA 60  
 25 AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA 120  
 TATTCTTCTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTAAAGTAT 180  
 AGTGCATACA TTTGTTTAAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC 240  
 30 ATACCACCTG GTTTAAGTAC TCTATTCAAT TyTTTTAaCG CGACTAAATA GTCTGGCACA 300  
 TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC 360  
 ATTGCATCAC CATGAACAAG TTAAACATTT TCCATTGAAG CAGTTTTTTC TTTTCCTACT 420  
 35 TCTAACATAT TCTCACTAAA GTCAATACCA GTAACCTCAC CTGTTGGTCC TACAGCTTTG 480  
 CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT 540  
 40 CTAACACCCA TGTCTTTCAT GACGCGTTTT CTCCATACTT TATGCTGCTC AAAACTAATA 600  
 ATATTATTTA ATCTATCATA TTTTTTTGAA ATATTTTGAA AAACGCGATG TACTTGCTCT 660  
 TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA 720  
 45 TATCGTGTA GATGCTTTT ACTTCACTTT GATTATATTT CTTGAAGTAT GATGGATAGT 780  
 AATCAGACAT ATCTTCAAAT AAATAATTAT ATATTTCCGA CTCATCAATA TTGATACCGA 840  
 AATGAGATAA CGTAAtATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT 900  
 50 CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCAA TTCATTAATT TCAACAATTG 960  
 CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT 997

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

10 CATTCCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG 60  
 CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT 120  
 15 TTACTAATTT GCTTTTTTCCA TTCTTTAACC ATAAATCAAC TTGTAATTGC CACTCAATAG 180  
 GATGATTTTT AATATAAATT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT 240  
 GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC 300  
 20 AGCGACAATA TTTGATATAT TGATTAATTG CGAACTTTGA TAATTTATAA ACAGCATGAT 360  
 AATCACAAGG CGCCTCATT AACAATCAC TAATTTTGGC ATTTCTTTTT TCAGCGACAT 420  
 ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT 480  
 25 TGAACGTATG AAGTTTTTCGA GTGAATGGAT TAATAAACAT ACTTTGAAAA TGATTGAAC 540  
 TCACTTTATT ATGACAATAA TCAACATCAT TTAmTAACCA ACTTACTTTA TATCCCATTT 600  
 TCTTkaaacc TTCCGTTCTG TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT 660  
 30 CAATAACATA TTTATTATTA ATCAAAATAT CCGGAATTG TTTTATTTCT TTAAAAAATG 720  
 GCTCTATCTC TACTTTACAT CCTTGTTGCT GTATCATCTG TGCTAAAATC AATTTACTTT 780  
 35 TATAATGTTT AATCGTTTCA TTATTAAAC ATTTTGTTC CGCTAAATGT TTATGTGCAA 840  
 AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTTGCCACAC ACCGGACAAA 900  
 AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG 960  
 40 CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTTCA 1020  
 GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG 1080  
 TGGCCTAATT AAATAATCCG TTAATTCCAG GTGGnChC 1118

## (2) INFORMATION FOR SEQ ID NO: 983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATT TTACGAGTCC 60  
 ATATTCATTG CTTCACTGAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120  
 5 TCAAGGTAAT TGCAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180  
 TCTAACTGTT GGTAAGAAAT GCAACCATT CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240  
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269  
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(2) INFORMATION FOR SEQ ID NO: 984:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCAAGTG GAAnnGGTTT TGGTGGAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60  
 ATTGTATTTT TTAAACTTTC CGCATAATCT TGATGGTCGA TTAACTTTTC GCGATAACAA 120  
 25 TATTCAATCA CTTCAGAAAT CGCTTGCTCT GATATCTCTT CTTTTGTAA ATATTGTATA 180  
 ACTTCTTTTT CAGTTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240  
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298  
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(2) INFORMATION FOR SEQ ID NO: 985:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 431 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60  
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120  
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180  
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTCTtT 240  
 GAAAAATGkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GARGARGATT tATTtAACyT 300  
 50 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrATTtGAA AGTCGATGAT 360  
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420  
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## (2) INFORMATION FOR SEQ ID NO: 986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

AAGGTTAGGn TGGAGTACCC AAAGTAGGTT TTAAAGGTTG GAAATACnAG GAGGATGAAT 60  
 AACATGAATC AGTCAGTCAA ATTACTTAAA CATTTAACAG ATGTAAACGG CATTGCTGGT 120  
 TATGAAATGC AAGTTAAAGA AGCAATGCGT AACTATATAG AGCCTGTCAG TGATCAAATT 180  
 ATTGAAGATA ACTTGGTGGC ATTTTTGGAA AGAAAAATGC TGAGAATGGT CAATACTCAT 240  
 TATGATTTCT GGTCTATGGA TGAAGTGGTT ATGGTAACAA GATGTAAACT GTTATTCATT 300  
 ACGCGTGGTG TGTGATCAGC nGCACTCAA 329

## (2) INFORMATION FOR SEQ ID NO: 987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

CATATTATTT nTATATGAGT TTACCACTGT CAAAAAACA ATTGCTTAAT GCCAACTATA 60  
 TTACATGCAT TGTTTTAAACA TTAATTGGAA CGCTTGTTAT TAGTTTATAT GCTTATGAAG 120  
 CAGATGTGAT TGAACCAAAT TCAATCTATT TTTCAACTGC ATATGCATTT GTCATATCTA 180  
 ACTTCTTGTC TATACCAATT GCATTTAGTC AATTTACAGA ATTGCGTAGA GTCAAAGTGC 240  
 CATATGGTAT ATACGTGTTT ACTATTATCA TTTTAGTTCC ATTTTTATTT TCAATTGCAA 300  
 TAGTATTGGT GAATTATTTT GTTCTAAGTC AATCATCATT CCCAGATTTA TATTCATATA 360  
 TTTTAAATAT TGGTTTCTA ATTATAAGCA TTGTTATACT TATTGTTAAT TATTTTAAAC 420  
 AGCTCAATAA AATAAATACT AGAAAATTTA AAGGAGGCAG TCGATGAAAT TAGAACATAT 480  
 TACAAAAAAA TACGCTCAA ATGTCGTTT AAATGATATI GATTTTGAAT TTGGCGAnAG 540  
 TAGAA 545

## (2) INFORMATION FOR SEQ ID NO: 988:

(A) LENGTH: 607 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

10 ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTATT CAACCGTTCC 60  
 AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT 120  
 TAAATATTG ACGGCATCTT CATCAATTTT CCGTGCTATT GTTTCAATAC AGCGCGTAAT 180  
 15 TCCCTGTTGA TGTGTTTCAA TGGTGTGATC TTCAAAGTAG TGTTTCATTT CGCTCACAGT 240  
 AGCATAAGGG AGTGATATAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT 300  
 AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCCAT AGTTTAACTT 360  
 20 CTCTTTACCA TCGTGATTTT CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTTAA 420  
 CTTTCCAATC GCTTGTTCTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA 480  
 TAAACTCCAG CTATCACAAT GTATCAGGT TCTTCTTCTT TCATTTTTTC TACGAACATA 540  
 25 TCTAAAATAT ACGCTTGATC TTCTAAAAGC TGTTTGCCAT CTAATATTTT CCCTAAGTGC 600  
 CAGTCTG 607

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## (2) INFORMATION FOR SEQ ID NO: 989:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 722 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

40 ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC 60  
 TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA 120  
 AGTAAAAGAT AAAGCGCCTG AAATTGGCTT GGCGACAGTA TACAGAACGT TAGAGTTGTT 180  
 45 AGCTGAACTA AAAGTTGTCG ACAAATTAAT CTTTGGTGAT GGCGTCGCTC GTTTTGATTT 240  
 AAGAAAAGAA GGCGCAAAAC ATTTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT 300  
 50 AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA 360  
 TTTTAAATTT TTAGATCATC GTTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA 420  
 AGGTAAAGGA TAGTAAATTG CGTAGGTAA ATTAACCTTC GCTTTTTTTA GAGGTGTGTT 480

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TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600  
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTGTh TGGGGCATT 660  
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720  
 TC 722

(2) INFORMATION FOR SEQ ID NO: 990:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 366 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

ATCCAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAA AAGAATAAAT 60  
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTCAA GTA ACTAAAT 120  
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180  
 25 AGTAGATGCC AATTGGCAAA CTTATATTAT GATTGCCGTC TACTTCTTGG GThATGACTC 240  
 CAACTTATTG ATAGTGTThT TATGTTTCAG ATAATGCCCCG ATGACTTTGT CATGCCAGCT 300  
 CCACCGATTT TGAGThAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360  
 30 GTATTC 366

(2) INFORMATION FOR SEQ ID NO: 991:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60  
 45 CTGTAATAAA TTCTAATTCT TCATCTGAAA CTTTTACAAT ATGCGCCAAT GGCAAAAAGG 120  
 TATGAATAGT TTGTCTTAAA TCTTCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180  
 CAAATACGAC AGTACCATTT GCATTTAATG TTTTGGAAT CAATTGATAA TGTGCATCTC 240  
 50 TCATCGGACT ATCGACCAA TCAACAGAAC AAAAATGTAC TACATCATTT TCATTCACAT 300  
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGT CTTTCTTCC 60  
 AACATACCGC CTATAATGCT CAAAAGAAA TCAGCAGTGG AACCACTACG TTCCCTACCG 120  
 CTTTATCATT TTCAGGCTTA AATATTTTAA AAATTTTGTG AGGAATCCGC TTAAAAAAC 180  
 TCATATCTTC AAAAAAATG ACAAATTTA AATTTTGTAA TAACATCATT TTTTAGTAAA 240  
 TGTATAATT TCTTTATAAT ACAAATATCG AAAGAAGGCG ACTGACTTTG AAAAAATTAT 300  
 GTTCATTAAT TGTAGGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGnAAAGA 360  
 ACnAACnAA A 371

(2) INFORMATION FOR SEQ ID NO: 993:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT 60  
 GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTCGGTCA ATCATCGATC 120  
 AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCGATTCAA 180  
 CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG 240  
 ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCATGTCG TTTTGATTT TAAAGCCCCT 300  
 ATAGCAACAA GTGCTTCAAT ATGGGAACT ATTAAACTA TTGAAGATTT TGATATGATG 360  
 TCcAGTTTTt TTGAtAAAtG GCTTATAtG ATCATCATCC TATACCTTTT CGCAACCTTT 420  
 TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGTATTCT ACCAAGTTTA 480  
 TGCTACCTAA ATGGGnTATA TAAATAAGC AAAGCAACGT GCTGATAACA 530

(2) INFORMATION FOR SEQ ID NO: 994:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 551 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

	TATTGGATTh TThCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC	60
10	ATTAATATCA ATCCCACTCA AATTCTTTCA CATCATTGAG TATAAAATAA TATGGTGATA	120
	TACGTTGAAG TTGATThTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA	180
	GTCATCATCT TCAGTGTThA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG	240
15	AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA	300
	TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCTT TCAATATATA TAAATGCGCT	360
	CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTYAC	420
20	TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTACT AATAACAAAT AACTAATTAT	480
	GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC	540
25	AAAATAATAA A	551

(2) INFORMATION FOR SEQ ID NO: 995:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 729 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

	ATTCGCCACC ATTAGGTAGT GGAACACGAA CTTCATCATC TAAACCTTTA CCAATTAACG	60
	CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC	120
40	CAACGATTIG ATAACCTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTTAC	180
	CAATTTTAAC AACGTTGTTA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT	240
45	GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT	300
	CAGAGTTCTC TGATAAGTCA CCAAATGAAC GTGCAACTTT AATTTTCTCT ACAACTTCAG	360
	GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTCAAAA CCTTCTTGAG	420
50	TCATTGGATA TTGCTTTTGA TTTTCCATAT TGTCATCTTC CTTTACTGAA TTATACTATT	480
	GCTTGCTAAC TAAAGACTGA ATTTTGTG TGCTAATATC TATTGCAACT TTATTGCTCC	540
	CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA	600

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TTAGTATCTC GTGTTGAAAC GCGTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720  
TnTTnAACA 729

(2) INFORMATION FOR SEQ ID NO: 996:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60  
 GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120  
 AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180  
 GAAATCATTT TAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240  
 GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTTT GCCAGCAGCT AAATAGAGGT 300  
 GTATGTACGA CTTCCAnCTG TAGnG 325

(2) INFORMATION FOR SEQ ID NO: 997:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 271 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCama TACATTTAAA AATAAATCAG 60  
 TAGTAATTAA CTGTTGGCTA CGCTGTTTCAT TAACCACTTT AGCCTCAACT AGTCCTTTGG 120  
 CAATCAATGT CTTAACTGCA CCATCTGAAT TGAtACTACG AATTAAATTCA ATATCACTTC 180  
 TTGATAATGG CTGGTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGAtAAT 240  
 TTCATTTGTG aCTTTTGTTT AATTGAATTG T 271

(2) INFORMATION FOR SEQ ID NO: 998:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

5 TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60  
 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACTTCTAT AAGTAATGCA TATTGCGAGT 120  
 GCAGGaATGA ATGAGTGCTT GATTAAATC CTTATGGGTG GTTGACATAA TTTAAAGAAA 180  
 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAGTAGGT ATAGTTTAGT TTTGAGTAAA 240  
 10 TCTTTTTTAAA GGTGTACTTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTTAATCGGC 300  
 CTAAATAAAA TAAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAAAACAC 360  
 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTTGTC CTTTAGTGTA 420  
 15 GCGGTAATTT TTAGGACTTT TTGGTGnAA AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480  
 TTTACCGCCA AAGCCATA 498

## 20 (2) INFORMATION FOR SEQ ID NO: 999:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 568 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

30 TGAGCTGGTT GTTATTATC ATCAGTTTTC TTCTGATTAT CATCTGATTT ATCTTGAGAT 60  
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120  
 GCAGGACGTT GCTTTGTAGG TGCTTGTGTC TGAGGTGGCA CATATTGATA TTGATTCTGC 180  
 35 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATCTGCTC TTTTCTCTCT 240  
 TGTGCTTTT TCTTCTCTC TTTTCTGCA TTTTCTTTT GACGCTTTTC TTTTGTTC 300  
 40 TGCTTTTGTT CGTTCAACAT ACGTTCTTTA GCTTTATTCTG AATGATCTAC ATATGCAAAA 360  
 ATTGCAAATA CTAATCCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420  
 GTTGTACTCA TTTTCTTCTT ACTTCCATCT TCATTTTTAT TGTAGTCGTA ATTTTGATTC 480  
 45 GACATACTCT CCCTCACTTC AAATAATTT AAATATAGAA ATTATCACGC AACCATTAAC 540  
 ATTTTCACAA CTAATTTGCG ACCnAGTA 568

## (2) INFORMATION FOR SEQ ID NO: 1000:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

5	AGTGTTCCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC	60
	ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA	120
	ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAACTAC AAGTGTAAT AAACCTGCTT	180
10	TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAAACCAAT AATCAATAGA	240
	GTTAATATTT AGAAATAAGA TAATAGTACA TAAACCAAAT CACTCTATTA CATATTAATT	300
	TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATTGCAA CAATTCTACA	360
15	TATATTTCTT CAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT	420
	GATTAACTA AATTAATTAG TTAGCCTTAA ATTTAACAAA TTAAATCAAA CCGAATGAGG	480
	CTAAATTGGT TATTTTCAA GATATGaTTT GTATAAATCA AAACATTTCT TACAAATCAA	540
20	ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA	600
	TCTACTGTCT CATCTTTCAG TTCTTTTTTA CGGGTCTGTT TTCTAATTG AGCACAATCT	660
	TCGATTTCTT TATCTAAATG ACTACCAATT AAATCTATTT CTTCTATTGT TAAATCGCTA	720
25	TCTCCATCTT CTTTATCTC TGGTATTATT TTTCTTCAA CTAAGTCACG ATATAGTGTT	780
	TTTGAATTCT CGTTCAATTT CGATTCGTGA TTTGAATAC TTTCTCCGC ACCAATGTAT	840
30	ATCTATTGGC ACTAGCTTCT ACTTTTGTA CATCAATAAA AATTGAATTA TCATCAATAA	900
	GATTTTGCTT TAAACATTGA CTATAGAAT GAATAAATAA AGATTCAATT AACGCATCAG	960
	TATTAGGATT CACTCTAAAA CGATTAATAG TTTTATAAGA AAGTGTTTGA TCTTGGGCTA	1020
35	ACCACATCAT TCGAATACTG TCATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG	1080
	ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGaTGATAG GATGTTGCAC	1140
	CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTTCAATTA	1200
40	CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG	1260
	GGGTCATGTT ATAATTTTTA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT	1320
	TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG	1380
45	CAAGTTGGGG AAAAATGTCT TATTTTTTCA AAGTATTTAA AAGTAAATT ACATGTTAAT	1440
	A	1441

## (2) INFORMATION FOR SEQ ID NO: 1001:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

	TAATAATATC TGTCATATTA AGTCTCCCTC ATTAGAAGTC ATTATAAATG AAGTTATTGT	60
10	GTGTGTCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG	120
	TTAATAAATA TGGTTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTITAGATT	180
	TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA	240
15	AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA	300
	TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGCATC ACTCAAKTAT TGTAATGAT	360
	ACACTTTGTT GAGACATCA TTCATTTTAA AGGTTATTTA AACAATAAAC AATTACAGTC	420
20	TATATAACAA TTTTGTATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA	480
	GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTGCAAG TCAAGCATAA	540
	CATATTTAAC AATTGCTTTG CTTGGTTTTA CCAATGGATT AAAAACC	587

25

(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 522 base pairs
	(B) TYPE: nucleic acid
30	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

	CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG	60
	TTCGTCCAAT ACCTTTTGTG GAATCGAATT TACCACCTGA GCGTATATGA AAATGTACTG	120
40	TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTT AGTTTTACGA	180
	TTTCTTTTTT CTTGAAAATC TACATGGTAC TCACTTGGAT ACTTTAACCA ATTTGAATTT	240
	TTTTCTTCTT TATGAGATTC AAACTTTAAA TTTGAATGAA TTGAGCCTTG TTTTTTAAACA	300
45	AGTAATACAT TCTGTGCATA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT	360
	ATATTtGTWT TCTCATCATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTTCCCA	420
	ATATCATCCG GTGCTGTTGA ATTTTATCT TTATTAGTAA CATTACGTTG CTTTGTGAn	480
50	CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT	522

(2) INFORMATION FOR SEQ ID NO: 1003:

55

(A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

10 TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAT GCGTTCTTCA ACTTGTTGCC 60  
 TTGCCTCTCC TTTGAAAGGA ACAATTCGAT CTCCGAATAA GTCCTCAGGC TTGTATAGAT 120  
 TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180  
 15 TAAAACGTTG ATACGATTGG WTAGGTGCAA CATTTTCAAG TGTGTCACTT GCGCGTTCTT 240  
 GCGTTGATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300  
 TThGAGCTTG AGCAATTCCA AGT 323

20

## (2) INFORMATION FOR SEQ ID NO: 1004:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

30 TTCTAACTTG ACGTGA CTGG GCATTTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60  
 GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTGGTA CGAAAAAGTC 120  
 35 AGTTTTAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTGG 180  
 TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240  
 GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300  
 40 GCCGTAGGGT TTGAAAGATA 320

## (2) INFORMATION FOR SEQ ID NO: 1005:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 305 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

55

CGATATTTAT AAAAAATAAT ATTTCACTTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180  
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240  
 5 CTAAATCTTT ATTATATGTG ATTAAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300  
 TATTG 305

## (2) INFORMATION FOR SEQ ID NO: 1006:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

TTCAAGATAT CAGTATAAAT AAAAAGTTAA TATGCTCATT ATAGACAGCT ATAACTATAT 60  
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTATTAC CATTTTCTCT ATTTAAAAAC 120  
 ATATTTTTTG TATTAACAAT TAAAAGTGGG TATATATATT TAATGAACCA ATTTTTTAGG 180  
 25 AAAGTAGGGC TAAACCTATG GAAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240  
 ACACAGTGAA TTAATAAATA TTAAnCAAGG TATTGGGGAA GTAnCACCAG CATTAGGTCC 300  
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GnAA 334

## (2) INFORMATION FOR SEQ ID NO: 1007:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

AGAAAATTTG TTATATTAGA AGCGAATAAT TTTAAAACAT ATTATGAAAT GTAAGAAGAA 60  
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAATTCCA TACAATAGGn GAnGTAAAGT 120  
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180  
 GTGTAGTTGA GGGGAGAAAA ACTAAAATGC AAAAATATAT TCTCAATGGA TCATTATAAA 240  
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300  
 50 AGATAATTGT ATTAATGTAA AAmATAAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360  
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAACT TTTTGTTTAT 420

AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540  
TGAAGCCATG GTTAGAAGTG GAAAT 565

(2) INFORMATION FOR SEQ ID NO: 1008:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACGTTTAC TTGAGCGACC ATCTTGATAT 60  
TTAAAATGTT TATCTAAGAA TGGCACAACCT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120  
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180  
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240  
TTTTTAAATA CTGCATATTC ATATATTAAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300  
ACAAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360  
TCACGTGAAA TAYYAAGTCy ATTtTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60  
CTCAATATAA AAaGTCCCGC TTAATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120  
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180  
ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240  
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGTAATGTC ATATCTnTAT TTGATTCTTC 300  
ACCAGTTTGT GGTAATGATT TTGCTTTATT TTCTTGtGTA TTTGTATTGT TTTGGCTTTG 360  
GAGTGTGTCC ATCATTTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420  
GCCTCGCTAG AACCTGCCCG AGGTTTGGAA CCAC 454

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA 60  
 ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA 120  
 AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC 180  
 TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCCAGTTA CCAACCGATG 240  
 AAAATCCGCA AGCCGATGGG GAATACGGTA TTTTCCGGCC GTTAACCAAC CACCCATTCC 300  
 GGTATCCGG GAAACCATTC CATCCTTTTA GGAGnChCCG GTnCCnAAAA GGACCTCGGG 360  
 TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAAG 400

## (2) INFORMATION FOR SEQ ID NO: 1011:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CAAAAGATG GGCTAAAGCT 60  
 TATACAATTA CTGTAGCAGT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA 120  
 TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACTTCCCT TATTATGGGA 180  
 ACATTGCGGT CTCTTGAGC TATTTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA 240  
 TAATGGCACA TTCTTAATAG TATACCAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC 300  
 AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACChT 360  
 AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC 400

## (2) INFORMATION FOR SEQ ID NO: 1012:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

	CTTTATGGGA TACACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT	60
5	TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT	120
	ATAGTGCAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT	180
	TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC	240
10	TAGAAAAaGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTTGCGGGGT CATCTAGGGT	300
	GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCCAGCA GCAACGCGAG TTGAACAGCC	360
15	TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG	400

(2) INFORMATION FOR SEQ ID NO: 1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

	GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAAATGATA AAAAAATCTG TGAGATTGCA	60
	TCATTGAGAC AAACATCGCT ATTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG	120
30	AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA	180
	ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCATCA ATTAAATGCG ACTGTTAAAC	240
	TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT	300
35	AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG	353

(2) INFORMATION FOR SEQ ID NO: 1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

	CAAAGCCTTC AACAAATAAT CTTTIATTAG TACTGATTGG TTGCACAACA TAAGTTACAC	60
50	CAGGTTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTITAGCA CTATACTCTG	120
	TTTTTCTGA TTAAATTTTA TCTTTTAGAT TTTTCTCTTC CAAGTAACTG TCAATTAGTT	180

ATGAAATAAA TAATATAATG ATAACCTTAA TCGCGTTTTT TTTCTTCTTC ATTATGTAAC 300  
 TCCTTTTTTGC TTATCTATTC AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC 360  
 5 AGATTGTAAC AAATTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATACACGAT 420  
 GCTTTTAAAA AATTIAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACTT 480  
 TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT 540  
 10 AATTACCGAT GAAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCA 600  
 ATTATAGACA ATTCAATAAT TGCGATG 627

## (2) INFORMATION FOR SEQ ID NO: 1015:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA 60  
 25 ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTCAGTTG AAGAAATTCA 120  
 ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC 180  
 30 AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA 240  
 AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT 300  
 AAAAGAACAA GCAATTCAAG CGATTCAACG TGCGCAAAGC ATCGATGAAA TAAGTGAGCA 360  
 35 ATTGGAACAA TTTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAAG AACTAGCTAA 420  
 ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA 462

## (2) INFORMATION FOR SEQ ID NO: 1016:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTTAA 60  
 50 TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTCCATC AAGTGTAAAC 120

ATAAATTGCG CATATCCACC nAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

(2) INFORMATION FOR SEQ ID NO: 1017:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

15	GTTGAAACT ATAAGATCA nATAAGGTAA AACAGTGGTT TGTGTCATTA GTGGTGGTAA	60
	TAATGATATT AATCGAATGA AAGAAATTGA AGAACGTTCA TTAATAACG AGGAAATGAA	120
	GCATTACTTT ATCTTAAATT TCCCTCAACG TCCAGGTGCA TTGAGAGAAT TTGTAAATGA	180
20	CGTATTAGGA CCTCAAGACG ATATTACTAA ATTTGAATAC TAAAAAT	227

(2) INFORMATION FOR SEQ ID NO: 1018:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

30	GTCTTACTTG CACAAGGTAT TATTTCTATC TTAATCGTTG CTTTCGCAAT CATGCTATAT	60
35	ATCATTAATA TTTTAGATGC ATATCGTAAT GCTGAACGAT TTAATCGCAA TGAGGAAATA	120
	AAGGATCCGA AGCGCGTATG GTGGCACATG GGACAAGACG TTCCCATACT TACTAATCTC	180
	ACCAGGTACA TnCTTATTGA TATTGTAGTG TAATTCCATT ATATTATGTT GGAGTAGCAT	240
40	TACAATACAA TTATACACGC GCCTCGAGAC nACATAGATG GGTG	284

(2) INFORMATION FOR SEQ ID NO: 1019:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 779 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

55	CAATCATCAC ACATAAATGT TCGAATAGGA TTGTTTTTAA GTCGTTTAGA CTCAGTTGTG	60
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CACCTCAATA TGAGTTACAT GGTGATTTCG ATATGAATAA CCATCTTCTT GATTGTAAAT 180  
 AAAACTATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA 240  
 5 TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTG ATAATCGAAT 300  
 AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA 360  
 TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTCT GAATTTAAAG TAGGCGGATT 420  
 10 AGTTTGTCCt TctAGGATAG CaCGATTCCa TTCatGATTA TCTTCAAAGT CGATTGGTTT 480  
 TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT 540  
 CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT 600  
 15 CCCACTCCCT ATCAATGTAT ATAGCATTAT TTTAACACAA ATTGCTAACG ACACATTTTA 660  
 AATCTACTTG CTTTTTAATA TTTAGTAAGA TAACTTTTA GTAAGACTTG AGAATTTATA 720  
 20 TAGAGGGGGA GCGTGTCATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA 779

(2) INFORMATION FOR SEQ ID NO: 1020:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 950 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC 60  
 TAACCTAAGT AATACTCGCT TTTCTTAAAT CCTTTAGAAA GGAAGTATAT ATCATGATTA 120  
 35 CTTCAATTCAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA 180  
 CAGCGTCATG GATTAATGTA GTAGAACAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC 240  
 40 AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTTCCCGTA 300  
 TTGAATATGA CGAAGATACT GGTACTCAT TAATCATTAT TGATTTACCT ATCGTCAATT 360  
 CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG 420  
 45 GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTTT AGAAAATTTA CCTAAGCGTG 480  
 ATATTAATTT AAAATTTTAC AGCAGATTTG CATTAGAAAT TTTAACTACT ATTGCCGACC 540  
 ATTATAATCG TAACTTACGA TTAATTAATA AAAGTAGAAT TCGTATTGAG AAAGAACFAA 600  
 50 AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT 660  
 ACTTTTTAGC TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG 720

AAGCCATCGA AACAAACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840  
 CTTCCCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900  
 5 TATTAACgTT ACCAAyActC GTATTTAGTT TCTTCGGTAT GAATGTGTCG 950

## (2) INFORMATION FOR SEQ ID NO: 1021:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAAACT 60  
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTTCT ATAGCGTTAA TTTTTCATCG 120  
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180  
 TGAAAAATAT TTAGTGGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240  
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTTACAAA GTTCATTATT 300  
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360  
 TCAAGaTTTT GAAAAAGGTa TTA AAAaCAC ACCGAaTACG aGTTTTtAA TnGGTTCAGC 420  
 30 TCAAAAATTT TCAACAGGGT TACTGT TAAA ACAGTTAGAA GAAGAACATA AAATAAATAT 480  
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAAACA TCTAAGCC 528

## (2) INFORMATION FOR SEQ ID NO: 1022:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATTnCGGT TAAAgTAKGt TTCAGCTTCT CTCaTTTTAG AAGTACCGaA AAtTGGTTGG 60  
 45 TTAtCTGGAT TTAATrtCAC GATAAATATT GCTTACTTTG TTACTTTGTr AAATGTACCC 120  
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180  
 50 ACAATGATTT CTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240  
 TAATACTTCA GAGTCTCTGA ATAATGCACA AAnTGAAATA CAAGTTGTCC AGTTTGGTAA 300

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTT GAATTAAATC 420  
 TGTA AAACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480  
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTTT 540  
 AATAAAATGA AAAGAGTCAA TTTCACATTT GTATTAAATT TTGATCAAGT CAACAAGAGT 600  
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660  
 10 ATTTGATAAA ACTTACACTT TTATAATGaT ATCAAATTTA CAAaGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60  
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120  
 TTCTTTTTCa TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180  
 TCGGGaATcG GGTTATTATT TTGTcAAAAA ACCGTCGATG CAATGATTCA TAATCCACAA 240  
 30 TCAGCCCAGA TTTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTT 300  
 ACAATTAGAT TATCTTCACG TACAAGATTA TAAATATGAT AAACTATTC ACTTGaTTAA 360  
 TTGTATTAAT TGaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420  
 35 TAATTTAAAA AAATTGTTTA TAAAAGGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480  
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACAaTTAA TCCTCAAATC CAATTAACCT 540  
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTTGTTGTG CTGAGCATT ATTAAAAAGA GTATTTAAAT TTAGTTGTTG GTTTGTAATA 60

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTCGrAATA ATGCTTATCT 180  
 TTATCTGCAG CTAACCTGGAA TTkCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTA 240  
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300  
 CAACAGATTT AKGAATGCCA AGCCCTTTAA CAATTTCAATC TGATGCATCT GCGCTTAATn 360  
 CTAATGAAGA TAAAAACGAt TAeCTTTTCAT CkktTCTTGG AACTTCACTT CATTTTCAAA 420  
 10 ACGGTCATTA AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480  
 ATTTTTC 487

(2) INFORMATION FOR SEQ ID NO: 1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAAATTTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60  
 CTCCTTACAG TCGATGAATA GTATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120  
 30 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180  
 CAAAACTATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240  
 ACCTTATCAT AGCAAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300  
 35 CACATTTGaT TTAAAAGATA CTAAGCAATT ATTGtAAAAT TAAAACCAA AAaGCAACAC 360  
 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTA(nAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60  
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCCAGA AATTTATCCA TcATGATTG 120  
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

CTTATATAAA AATGGCACAA TTATTTTCATG TACCAACAAG AACAAATATTA ATACGTCATT 300  
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

(2) INFORMATION FOR SEQ ID NO: 1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTC GTTTTAATAA TGGTGATACT GTACCAGTAT CGAGTGCTAA TTCAGTTACG 60  
 ACTTTCCTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120  
 TATGTTAGAT TGTACTTCTT AAAAAGTTTG TTAGAGTAGT AGCGATTAAC TTGTCTTTGA 180  
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTTAAATTAT GTTGATCAGA CATTAAAGTT 240  
 CTCCTCCAGA CATACTATCC GTTTTTTtTCT CTTTTCGGAT TGGTAATCAT TAAAAAGTTG 300  
 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GChAAAATTA AAGTATGTTT 360  
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420  
 CATTTTTTAA AATAACTGTn ATAGAAAAGA 450

(2) INFORMATION FOR SEQ ID NO: 1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTTCGGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60  
 ACTTTCGATA GGGAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120  
 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTTaAGCCAA CGTAAAmCAA TTTTAGCaGT 180  
 TTCAATAAAAt GCTTCTGTAC CTTCAAtCTG TGrACCaATA TGACAATGTA CACCTTTTAA 240  
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300  
 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360  
 aACACCTGGa TTAACCTGTA AtACAACCTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420



AATTCATGT TTCGTTTTAT TGTTACCATG GAAATGGATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

15	GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC	60
	GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTTCAGGT TCGATTCAAT	120
	TTGTTGTGA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT	180
20	CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA	240
	TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CCTATAGACT AGTTTGATAT	300
	TTATCTACAT CTCAAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTTnAGT	359

(2) INFORMATION FOR SEQ ID NO: 1030:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

35	TACATTGGTA AATAATTCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA	60
	TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT	120
40	AATTTTTGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA	180
	CTTCCATCTT TAACTAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT	240
	TTTCCACCTT CTTTTCTTGA TTTTTCACCC TGTGTTTCGTT GGTGCGCTCT CAAATTAATT	300
45	ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T	341

(2) INFORMATION FOR SEQ ID NO: 1031:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

GTCTAACTTT AATGTTTAAA AAnCTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60  
 5 AATATTATTA ACAGGCCAG CTTCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120  
 GATGGGTAGA CAGCCTTGGA TTGTTCTGG TTATATGCGC GTGGCAGAAG CAGCAACACA 180  
 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240  
 10 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300  
 GAAAnATTAG CTTATGnAAC GGTAGG 326

## (2) INFORMATION FOR SEQ ID NO: 1032:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60  
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120  
 TGATTTGTCTG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCTGGCA ATTCATTTAT 180  
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240  
 nTCAATCGAT ATCCTATTTT TCT 263

## (2) INFORMATION FOR SEQ ID NO: 1033:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

TTTCTATAGA GGATCCTGTA GAGATGCAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60  
 45 ATAAAGCTGG CATAAACTAT GTAAATTCGT TTAAAGCTAT TTTAAGATGT GATCCTGATG 120  
 TTATTTTAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180  
 50 TAAGTGGTCA CCTTGTTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240  
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

AGCAACAACCT CCGATATTTT TTTTCCCaTA ATCATtCATT ACCATCATCA TTTAAGAAGCT 420  
 TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAAACT ACAATGCATA 480  
 5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTTGT TTAAATTTT CTTTCTTAAA CGTATACTTT CTGGTGTAAC 60  
 20 CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTTA GAATACGCGG 120  
 TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180  
 TTTAGTGATG TTAACAGTTA AATCATTTTC ACGATTATGT TCACCAACAA TCATACCTTC 240  
 25 ATAAACTTCA GTACCAGGTT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAAATGGc 300  
 ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360  
 TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420  
 30 TGTCATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480  
 TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTACCTT TaCGTGcACC 540  
 35 TAAkGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCA 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60  
 ATCGTAAACG TCTTAGCACC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120  
 50 CTTAAAGATA TCAAAGATGT GACGCATATC ATATTCAGCT CGACAATTCC TTAAAGTACC 180  
 AGCATTTAGA AGGAATTATA TGAntTAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

## (2) INFORMATION FOR SEQ ID NO: 1036:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

AATAATGAGT AGGTTTTGAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC 60  
 TAATGCGTCC ATTACATTTT GCAATCATTG ATGAGGTTGA CTCAATTTTA AATCnACGAG 120  
 GnCGACGCCA TTAATTATTT CTGGTGAAC TAAAAGTCAA CGTCACTTTA TACACAAGCA 180  
 AATGTTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC 235

## (2) INFORMATION FOR SEQ ID NO: 1037:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT 60  
 AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTGCTT TATTGCCTAT 120  
 CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT 180  
 CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT 240  
 GTATCAATATG ATGCAAGTAA TCA 263

## (2) INFORMATION FOR SEQ ID NO: 1038:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

ATTGTACCTG GCACAATCTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT 60

ACCGTTATGA CATGTTGATC ATTTTtTAGTn AATGTTAAAG CTATAACGTG TGATATTGCG 180  
 AGTCTGTCGG CATTCAATAT CTTChAAAATG CCCTACAT 218

(2) INFORMATION FOR SEQ ID NO: 1039:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTTTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60  
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120  
 AATGAGAATA ACCTTTTtGAT TTTTCATGCA TAAGGCGATT CAATCAAAAAG CAATCACCTT 180  
 CCAACTGAAT TGTCATTTTG TAAAATAAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240  
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTTT GTTATGTAA AGTGGTACAT 300  
 TAATCATGTA TTTCGTATGA TAATTAACGA CAAGTGTAAT GGTAAATGT ATTTTATGGA 360  
 TGGAAATGCh ATAATAGGCC TGGGTTACCA TGGnGC 396

(2) INFORMATION FOR SEQ ID NO: 1040:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

AGCATTTTGT TTAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCCATTAC 60  
 AATTGACCT TGATATACAA TTTCTTTAAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120  
 ATTTAAATA GGTGCATTtCG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180  
 ATATTCTTTT GCTGCATGAC TTACTGTTAC GAAGGCATTA ACACGATGTT TTACTATGTG 240  
 TTTTCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAT TTATTAATAA AGGCATTTTT 300  
 CGCATATATt TCATGCGCAT CATAAACAAr ATTAGCTTTT TtATAATTGC TTAAATAGAC 360  
 CATTAAAT ACGTCGAAAT CATTTGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

- (A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCGTTT CTATTTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60  
 ACTTGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120  
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTTAA 180  
 15 CTTTGTATTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240  
 GAATAATAAC CAACnGAATT AATTCCGn 268

## (2) INFORMATION FOR SEQ ID NO: 1042:

20

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60  
 CAGATCATTG GAnTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120  
 ATGGATTAAA TCTCGTTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180  
 35 AAATCATCAA TTAAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240  
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

## (2) INFORMATION FOR SEQ ID NO: 1043:

40

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTCAGGTA 60  
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAAGCATA TCAAATTATC CAGAATTTAG 120  
 TACCAGATTT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGGn TTCCACAGAC 180

55

AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300  
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCCGCA TGAACGAAAT 360  
 5 TATATTTAAn GCTnCTAAG 379

## (2) INFORMATION FOR SEQ ID NO: 1044:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGAACT TGAAGACCAT GCAGATATAA ATGAAATAAC ATATCGATTA TCAAAAATTT 60  
 20 TCGGTATTAA ATCTATTAGT CCACTATTAA AAGTAGAAAA AACAATAGAG GCAATAAGTG 120  
 CAGGGACAAT TAAATTTGCG CCATTnTGAA GAAAACAGCA CATTTAAAAT TGATGTGAAG 180  
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240  
 25 GTATTGAAGC ACTTCGACAA TATTTCACTG aATGTCaAAC GTCCAGATCA TGgAAATTCg 300  
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT GnAAGAAGTT GGTTCGGGG 360  
 30 TTCCAGGTGG GATTTACcNg TTGGGTACTG GTGGGTnAA 399

## (2) INFORMATION FOR SEQ ID NO: 1045:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

AnGATAAACA GAGGAGCACA AAAATGAATn nAAATATAAT CATCAAAAGT ATTGCGGCAT 60  
 45 TGACGATTTT AACATCAATA ACTGGTGTCT GCACAACAGT GGTGATGGT ATTCAACAAA 120  
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180  
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240  
 50 ATAAACATGT TACTTATCAC ATGAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300  
 TTTATAATAA CCGTGGTGGA CTTTATAAAG TTAATAAGAT TGTAAGATTAT CCTGGTAAAG 360  
 AAGATATTGC GGTCGTACAA GTTGAAGAAA AATCAACGCA 400  
 55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 626 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

10	ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTTGTA GCTTTAACTT TTAGTCCAAA	60
	GTTATCTTTA AAGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA	120
15	TTCAATCGCA TCTTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC	180
	CATTTCTTCT GGTACTGATT TTGTTTCTGT ATTTGTTTCT GTATTTGTTT CTGTATTTGT	240
	GTCTTTTTTT GATTCATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA	300
20	GATTAATTTT GCCTTTTTAA ACATAGCTCA TCACCCATTT ATGTGkTTAT ATAGAATATT	360
	AAAAAGCATT TTAACAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC	420
	ATTATCATCA TAAAAGGCTT TTTAGTATT AATAGTAGGC TTTCTATTT GAATTGTAAT	480
25	TGTAGATTTT TCTGGCTTAT TTTAAAATT ATATAGTTTA TCACTCAGTT CAATTACATC	540
	ATCAACTGTA TTGTCTTTAG TAAAATTTT CTTTGTACTA AACAAATGTTG TTAGTGTATC	600
30	TGTATTAGCA GCGnAATTCA CTTCTT	626

(2) INFORMATION FOR SEQ ID NO: 1047:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

40	GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGA CTATTAT	60
	CCTGAAGAAA CAGATGCTGA TAACTTGTC ACTCGCATTC AAAAATTAGG TATGACGCGT	120
45	CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA	180
	GnTATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT	240
50	ATACAGACTA TTACGATCAT GTCCATTATT TAGCnCACTG TCATTATATG GTGGCATTAT	300
	GAGGGTATAA ACTTAGn	317

(2) INFORMATION FOR SEQ ID NO: 1048:



(A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10	ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG	60
	AAAAATATTT TTAGTGAAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC	120
	AAGATTACGA GTCATTAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAG TAGGTTAGCT	180
15	AAGnAAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG	223

(2) INFORMATION FOR SEQ ID NO: 1049:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 608 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

	AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT	60
30	GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAATGGT	120
	AAATCTAACT CTGGCAACCA TCTAATTAAA TCGACTGAAA TGGCATCATT AAAGTATGTT	180
	GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC	240
35	GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTT CyGACGATTA	300
	TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTTAtAA ATTCAGTTGr AAACGGtGGt	360
40	TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATTnAT TTAAAGTCGC TCTAAATCCC	420
	ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTACACCTAA	480
	TTTGAAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTTGATCTG TAACTTGATA	540
45	GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC	600
	AAAGGCAT	608

(2) INFORMATION FOR SEQ ID NO: 1050:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

TGT TTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60  
 5 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120  
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180  
 TGCTTTTGT ATCTATTTAC GTTTTGGTG TAGTCGGTTT TGGATTTGAT GTTTTCAATT 240  
 10 ATTGTCTAGG TAKTATCTTG ATGtYATwTA TTTCTTGGTT TAGGThTATT nT 292

## (2) INFORMATION FOR SEQ ID NO: 1051:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 734 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

TAAATCnTCA AAGATTTCTT CTAAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60  
 25 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120  
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTCAATTGA TCTCATTTGC 180  
 AATTTTATTG TACATTTTAC TTAATTTTTC TTCGAAATTC ATGTTATCGC CTCTATTGTT 240  
 30 CAGCTTCTTC TTGCTCTTTA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTTCATATT 300  
 CCGTTTCTGG TAAAATTCCA AATTTTCTAT ACTTATAGTA ATTTTGTCGA CCTACTTGAC 360  
 35 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420  
 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480  
 AATTTTGAAA TTGTTTATAC AACTCATACA CTGAaTCCAT AAATTCCGAT TCCGATATAT 540  
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600  
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660  
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCA CTPAATTTTT 720  
 45 CTTTCGAAAGT CATG 734

## (2) INFORMATION FOR SEQ ID NO: 1052:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

5 ATTTTAAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60  
 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTTACA AAGTTAAAGT CATCTCTATC 120  
 ACTTTTCAAA AATTGTGATA TGATTCTGTC ACTTTGTTTT TCAACCAATT CAGGCACATc 180  
 10 TCCATAAATa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240  
 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCCATA AGAGCTTGAA 300  
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTGAC CGTTTTtGTTG ACTATTGTAA 360  
 15 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACTTCT ATATTAGGaa GwTGATACAT 420  
 ATTGTTCTTC CCAGAAGAAA TCAAACTTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480  
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540  
 20 ATATTTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAAACTTT 600  
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660  
 AATAAACTA TCAAAAAAAT AGAAACTAC TATCTCCAAG TTTAAACTA CTAACCTGTC 720  
 25 TTACATCCAT AAGTTTAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

## (2) INFORMATION FOR SEQ ID NO: 1053:

- 30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

35 GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60  
 40 ATGCTATAAC TGCCATTAAT TGAAGACCAA TCGCATCTAA TGCGACAACA CGATCGGCAA 120  
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180  
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

## (2) INFORMATION FOR SEQ ID NO: 1054:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTGTC AATTTTCATTG TACATTTGAC TTAGCTTTTC 60  
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120  
 5 CGATTTCTTT AACTTCTTCC ATTTTCGTATT CCATTTCTGG TAAACACCA AACTTTTTAT 180  
 ACATATAATA GTTTTCACGG CCTAATTGAT CAACTCTGT ATTTATCCAA TCAATATAAT 240  
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAA TTTCACTTGAT GTCCATGGTT 300  
 10 CAAGCCCTTC TTCTTTAGAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360  
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

(2) INFORMATION FOR SEQ ID NO: 1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTG 60  
 TAAGTAATCC AAGTCTACAA GTTAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120  
 AGTTGTTTTT TATTCAAAAG GAAGAAGTAT CATTGAAGGA ACTGnACTTT AAAATAAGAA 180  
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240  
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300  
 GTATGTTTGa TGTAATGGaT AGTAAGCAAA TTA 333

(2) INFORMATION FOR SEQ ID NO: 1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTTAGCTT ATAAATTTTT ACGAAAGTTT 60  
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGAGTATTTG CCACTTGATT AGTACTICAT 120  
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTTAATATA TTAAGAAGCA CTCATAATCG 180  
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTTAAATAT 240

TAATACAGAT ATCAATATGG CnAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

TCCAAAACGG AGAGCCAAGA GTTAACTCTA CTTATATAGG ATACGCGCCA ATTGATGATC	60
CAAAATTAGC GTTTTCAATT GTATATACAA ATCAGCCTGT ACCACCACCA TGGTTAACAG	120
GTGGAGACTT AGGTAGAGAT GTAATTAACT ACTACTTTAA GCAGTTAGGT AAAGATGATA	180
AAAATAAAGA CAAAGACAAA TAAAATTTAA CCTGACGATT GTGTAGCGCA TGGTTGTAAA	240
ATTTTAACTT TGCmAATATT ATAGATCTTG GTATAATAAT AAAGTCGTAT TtAGaAATGA	300
TwAGGaGGGA AT	312

(2) INFORMATION FOR SEQ ID NO: 1058:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 404 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

GCCATTTTGC GATGCTAAAT CCATTGAAAA TGCAATACCT GAAAGTCCAC CAAACAAAGA	60
ATTGTTATAT TGACCACTCT GTAAATATGG TGCTAATTC ATGATGTACT TATGCACAAT	120
TTGCTCAGTA TTAATATCGA AAACTTTTtG AtAAGCATCT AAAACAAAA TGATACCTGG	180
TATACCATGT GATAAAGTTG AAGGTTCAAA ATAATCGGTT TCAGTAGATG CTTTTGAAAT	240
GAAATCATCT ACTTCTGAAA TCTCTTGAAA CTTCTTCTTC AATATTAGAT TCATATCAAT	300
CATTTTTtGTC ACCACACCAA TGCTTTTGAG TTTTAACAAT TTCTTTTACA ATAGATAAAA	360
CAAATGTTTC TTGATCCTTA TCAATGCCAA ATATTCGATT GnAG	404

(2) INFORMATION FOR SEQ ID NO: 1059:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GnATGACATA AGTGTGCCTT CTTTTTCAAG ACCCTCCATA GAAATAATAC 60  
 ATGGATGTGC ACCACGnTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACCTTCT 120  
 CTTGTGTTGC TAAACCTACA ACTGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180  
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAGAAATT CTTAAGTTTA AGT 233

## (2) INFORMATION FOR SEQ ID NO: 1060:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60  
 TAAATGTATA TCCTAGTGCG ATTGCCATTA ATTATCCGAT AGCTTTTTTCT GCTGCTTCCA 120  
 25 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTTAA TGCGATATCT TCAGCATTCA 180  
 TACCAGCTTC AATTGCTAAA CCTAATTCAG AGATAATATC TGATGCACCA GTACCAACTA 240  
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

## (2) INFORMATION FOR SEQ ID NO: 1061:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTTCAG CTTCTCCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60  
 TTGATCTAAG TCCTGCATGA TTACTTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120  
 45 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACCTACC TTCACTATAA 180  
 AAAACGAGTC TTTTATTGA AAGCCATTCG CCTTAATCAA TTAGACAAGT TGTATKATAC 240  
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTTAAGCAT ACTCAAAAAG ACTGGTACAT 300  
 GTATACCAGT CTAATTCGAA AAAATATATT TAGTTAAAAC CATTTCAAAA ACGACTTCAC 360

55

## (2) INFORMATION FOR SEQ ID NO: 1062:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA 60  
AAAAGTCGGC ACATAAAATT AATATTGTGA GCAATGCCAT AGATACATAA AACACCCATG 120  
ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA 180  
CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA 240  
GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTAA 300  
GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAAATACAT 360  
TTTCCCAAAC CTTACCCAGT GGAATCCTAG GCACCACCTT 400

## (2) INFORMATION FOR SEQ ID NO: 1063:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA 60  
AACGAAACGT TTCGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTGTC 120  
ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT 180  
AGAAGATATT GATAAAGCAG AAACTAAATA TGACCATACT AAAGTGAAA AAGTAAAAGT 240  
ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC 300  
AGAAAAAGGT AAAGGTATTC TTGATAAGA AGGTACTAAA GTaATTaAAG GTAAGACTAA 360  
ATTGCAAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT 400

## (2) INFORMATION FOR SEQ ID NO: 1064:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60  
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120  
 ACTTCCTGCA AGTCATTGTC AAAAACGATG ACAAAAACTT ACCTACTAAT CAAAATGTCTG 180  
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240  
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACAACAAGA ATTAAAAGAA CTTCAAAATC 300  
 AACTTACATC TAAAATCGAT TCAAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360  
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420  
 TTGGAAAGAA TGCT 434

## (2) INFORMATION FOR SEQ ID NO: 1065:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60  
 ATCATGATTA TATGGAAACG AAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTTAA 120  
 CATTGAATTT TGAAGGTAAn TAATTGGAAA AGATTTGAAG TTGCATCGTT ATTATCGTTT 180  
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

## (2) INFORMATION FOR SEQ ID NO: 1066:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

45 AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60  
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120  
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTCTGGTT GTAATAACTT AGGAGAGTTA 180

55



## (2) INFORMATION FOR SEQ ID NO: 1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT	60
TTAACTCTTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA	120
CTAGATCAAG ATAGTCCAAA TTTAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT	180
CTTCATAGTT AACATTTTCA ATCCATACTT TAGTCGTAAT GAATAGTTCA CTTCTATCAA	240
TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT	300
CAATATGTCT ATAACCCGCT TTAATTGCTT CTTTAACCGC TTCTGCnGTT TGTTCCTGAG	360
GAATTTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTTCAATAT	420
GATTCATAAA ATGAACCTCC TTTATCTtGT ATGTCCACTA TAAACCATGG AGCGAACTCT	480
ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTTT AACATTGTCA TCATAATTAT	540
CACTAGCATT GATTTTAGCA ATATGATTAT CATAATTATC AATTTTATAT TGTAGTAAAT	600
CTCTCGCATC ATGAATTGTC TTTAAGTTTT CATTTAATTC TTCGAGTTGC TTATTTAAAA	660
TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA nTGCGCTAAC CTGCAAAATT	720
CGATAAGCGA TTCAATACTG ACGCCTGCA	749

## (2) INFORMATION FOR SEQ ID NO: 1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTTAT GACGATGGCA AATATnATAA	60
GAAnATAA11 AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT	120
TTATGCCACC GCTCAAACCT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAACCTGTG	180
ACGTGAATTT CTAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA	240

TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTTAAACCGC 360  
 TATTGACAAA TATGAAGCGG AACCACCGTT GTnTTTCTTT TnCAGGTCCA ATTGAATAAA 420  
 5 TGTGATGAA TAGAAT 436

## (2) INFORMATION FOR SEQ ID NO: 1069:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60  
 CTTTAACCAA GCACTTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCGAAGC 120  
 ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTTAATATA 180  
 TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTTCGT TTAAGTCATG 240  
 25 TGTAACAAGC ACTAACTGTT CACCCTAATT TTAGACGCCT TTCATTTCAGG TAGGTCTTAT 300  
 TGAAACTGAA AACTTTGATG ACCTTTTGcA AaGCCATTAA CTGTATAAAG CATAGATCCT 360  
 CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420  
 30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCCTG GTATCAATAT TTGTCCTATT 480  
 GGATAACCCC TTTTATTAAA AACTAACACT CGACCTTGGA CCATACATTG CTACGGATAA 540  
 ATTATCGGCA C 551

## (2) INFORMATION FOR SEQ ID NO: 1070:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60  
 AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTTTCAA 120  
 50 AGAAATAATA CGTGTAACAAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180  
 TATTTAAAAA TTTCCGTCAA AATTTATCAC ATTATGCCAT CTATCTTTTT TCGTTAATTA 240

CAGAGTCATA TCCAATTATA CnGGC

325

(2) INFORMATION FOR SEQ ID NO: 1071:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 771 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

15	TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAnAAT	60
	ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn	120
	ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT	180
20	ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA	240
	TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTTC	300
	ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC	360
25	GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT	420
	GATGAAGCCT TACAACCACT TTATAAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC	480
	CGCCCTCAAG ATAAGGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG	540
30	ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG	600
	AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA	660
35	TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT	720
	CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAAA AATGTGATGT T	771

(2) INFORMATION FOR SEQ ID NO: 1072:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 237 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

50	CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTCGCG	60
	CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT	120
	TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn	180

## (2) INFORMATION FOR SEQ ID NO: 1073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

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CTTCTTGTGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG      60
CATTCTTCTCT CACCGCAATA CTAAAAATTT CACGTGGATG TACAATCGAA CTATTTAATG      120
TACCTTTTAAA AACACAGGTT TCTTTAATCA CTACATTTTT TGAATTTAAC AATAAAATGA      180
CAAAATGTTT TGTGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG      240
GTTGCGTTAT TTKTATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA      300
ATGCTGCTTT TAAAGTAATT GCTTTTTGTA ATCCAATCCC TTAACTTTT ATCAAATCGT      360
TAATTGAAGA TTTTTTCAAT TCATTCAGAT TCGAAGCAGA TTAAAGCAGT TCATTACTAA      420
TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT      480
TCGAAAGACT TTTTGCACCA TGGCTTAACA AACGTTCTCT TGGCATTCTCT GAAGTTACCA      540
TTTCTTTAAT TTTCAAAAAT ATACGCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG      600
TGAATTGATA AAAAAGGAAT TAAATATAAA TGGAACAAGG GGTAATAGTT TAATCGGCTT      660
AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AATATGACATA      720
AATAGTGAAT TGG                                     733

```

## (2) INFORMATION FOR SEQ ID NO: 1074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

```

ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTC TTGCCATTAT      60
TAATTTTGCC GAGCAGTAAT GGGTTGTTAA AGTATCCATC AATTATGCTT AGCAATATTG      120
AAAAATTTAA ATGAAAAAGC GGTTCATTC TTGAAAAATA GTGTATATTT ACATTTTGGT      180
AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCATTTGG TAGTATTGTT ATCTTATAGT      240

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TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAaWG GTATGAATTA 360  
 ATGCCGATTA TTAGTTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCTG AAAGCGTATT 420  
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480  
 GATTTACACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTtTTCTG CTTATTTTTTA 540  
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600  
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660  
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720  
 15 CACTTTCTTT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768

## (2) INFORMATION FOR SEQ ID NO: 1075:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TAAAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTTT ATAAAGTTGT 60  
 ATTTTCGTGTC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTC CATCGGCAAT 120  
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180  
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTACTTC TTTCGATTTT TATTATAAAT 240  
 35 TTTTCTAAA TCTCGTTGTA ATAAATCGTC TAAACCGCT TCATCTTGTG TAAAATCCAT 300  
 TTCATTCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCT TTTTGAATTA AAGATTGCAT 360  
 TACTTTTGCh ThAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

## (2) INFORMATION FOR SEQ ID NO: 1076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 753 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTTATCTC AATCTGCTGA AGCAAAGAGT 60  
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAACAAAG ACGGAAAAAT GTTTGCATCA 120

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAAA TGTTCGCTGA CAATCCAGAG 240  
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTACACA TGGTTTATCT 300  
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTACCAGA GCATAATTGG 360  
 GGTAATTACA AACTTGTTTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420  
 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTTGTAG AAGCTTTACA ATCATACAAT 480  
 10 AAAGATAAAG TCATTATGAT TTTAAATTAT CCTAATAaTC CGACAGGTTA CACACCTACG 540  
 CATAAAGAAG TGACTIONCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600  
 15 GTTATAGCTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660  
 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720  
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753

(2) INFORMATION FOR SEQ ID NO: 1077:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGGG AAGCAAGTGG TGGGAGAAAA 60  
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTTAAA TAAAAAGGAT ACTTAATGAT 120  
 35 ATGAGAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180  
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240  
 rCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300  
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360  
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtTCATGCaA ATGAT 405

(2) INFORMATION FOR SEQ ID NO: 1078:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 504 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT 120  
 CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA 180  
 5 AGTATACTTC ACAGAATTTA TAAAATTGTT TAGTCATCAT CTTCAGTGTT TAATTCAAAA 240  
 ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA 300  
 10 ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CATATATATT 360  
 CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG 420  
 TTTTAGTTTT ACCACCCCAA CGTTTTGTGA CTTTAGGTAA TTTTAATAAC GTGAACATTC 480  
 15 CGCCAATTAC TAATAACAAA TAAC 504

## (2) INFORMATION FOR SEQ ID NO: 1079:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG 60  
 TTTATGGTTT ATACCATGCA GCATTGTTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA 120  
 30 AGAmACATCC GCCACGTTGG CAAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT 180  
 TCCACTTTGT AACATTTGGC TTTTAACTCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA 240  
 35 TTTAATTATG GAATTTAGAG AACAAGTATT AAATTTATTA GCAGAAGTAG CAGAAAATGA 300  
 TATTGTAAAA GAAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa 360  
 AACAGTTGGA TTATTATTAG AGATTCAAAA TAAACTTGaT ATCGAAGTAT CTATTATGGa 420  
 40 CTTTGaTAGA GATGAGTGGG caACACCAAA TAAAATCGTT GAAGCATTAG AAGAGTTACG 480  
 ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA 540  
 TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA 600  
 45 ACTTCATTGA CAGATCAAGT ACTAAAAGGC AACTCATTTC AAGAT 645

## (2) INFORMATION FOR SEQ ID NO: 1080:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

5 AGATGCCAAA ATCAAAACCA ATAATTTGGC AACAAACATAT AAGTCCACTT TACCGGACCT 60  
 nTAAACTTAT CGTACTGTTA AGAACCAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120  
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180  
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240  
 TAACATCCCT TATGTTTAAT TTACTCT 267

## (2) INFORMATION FOR SEQ ID NO: 1081:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

25 ATATTTGTCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60  
 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120  
 ATTGATTTAT TTGCCAAAAA TAAGACATTA GGTTCCTAGTG AAGCAAAGCC CTACTTGGAT 180  
 30 GAATACCATA GTAAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240  
 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300  
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAAACT 360  
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420  
 AGATTGATCA TTTCTAGTG T 441

## (2) INFORMATION FOR SEQ ID NO: 1082:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

50 AAAATTTCTT AGtTGATGGT TATTGTTGTT GATTTGAATA ATTTGTAGCG AATATTTTGT 60  
 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTT AATCGTACTA ATTTTCAGCG 120  
 TTTGATGACA AAAGTGTATG TCCAACTTA AATAATGGCG ATAAAATTTA AGTCATGGGT 180



GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300  
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360  
 5 AAATTTCCAA ATTTTGCTTA CTATCTTTCT AATTTTACTT TTATATTGTG 410

## (2) INFORMATION FOR SEQ ID NO: 1083:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTCC CTTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60  
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGG TTAGTTATG YAAAGTAATG 120  
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180  
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240  
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300  
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTG AATTATATA GGCATCAAAT 360  
 GCAACATTTA TCATTAAGTG CAATGTTGTt ATCTATTACG ATaAACGCCT TTATAAATAC 420  
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTG 480  
 GACGATACTA CAGTTTTTACA TTGATAAAAA ATTAAACCT GTATACATTA CAGACCAAAA 540  
 35 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586

## (2) INFORMATION FOR SEQ ID NO: 1084:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60  
 ATCAATAAGA AAACAATAGA TGATGATCT GCAGTTTCTG AAGTGAAATA TGATATTAAA 120  
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180  
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360  
 ATCAATCATG AAGAAACTTT AGCTTATTTC GAAGCACATA GTTATTTTGG ATATGATCAA 420  
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480  
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540  
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600  
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

(2) INFORMATION FOR SEQ ID NO: 1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTaT tAaTACcATT TATTGgAAaT 60  
 25 tCcACCCcATT TCCcGGgCTt CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120  
 TTTAGCTTCA TCTATTCGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180  
 ATTAAGTAGC TTATTTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240  
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTCC TTCGTACTTA CTcATAGCTA TTTGTGAATA 300  
 ATGACCAACT TTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360  
 ATCTTTTCATT TTAGCAGCAG GCGTACCATC ACGTTGTGAA TACAAGTACG TATATGCATG 420  
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTTCCT CTGATTCATT 480  
 TGGATACCCT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTCTG 540  
 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600  
 40 ATTATTTCCA GATTGAAC 618

(2) INFORMATION FOR SEQ ID NO: 1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120  
 GTTCAACCAA ATCGTGTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180  
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAAAC TTAAC TTAA AGTCCAAAGT 240  
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTT TGAAGAAAGA 300  
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360  
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420  
 AGTAAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480  
 TAAATTATTT CTATATATAA nT 502

(2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCACAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACTT 60  
 GCTGTAAACC AAATTACGAG TGGAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120  
 30 ACAGGTAAGA CTACTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAAA 180  
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTGTGCA ArACAAAAAT TCATGAAACG 240  
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300  
 35 CTAGTAATAA TGGAGCTGTT GAAAATATAT CTAAAGATT ACCGAAAATT GAAGAAATTA 360  
 TAAGAnATCC CGAAAAATGT AAATTCCTA AATATGAACA GAATTATGCA AATTTAGCAC 420  
 ATGAATTAA 429

(2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180  
 ATGCTAAGCC AACATTGAAT AGACTTAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240  
 5 ACTATAATGA TAAGTATGTA GTTGTACTTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300  
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360  
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAAAG GCATCGACCT 420  
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAAAAGT TTAAAGTATA 480  
 AGGTTGAAGA AGGATGAGTT TAAAAATATG TGTTAACTGA TAAAAGGGGA nATCATTG 540  
 15 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGC GTGGTGTGAn 600  
 TGTTTTCTAA A 611

## (2) INFORMATION FOR SEQ ID NO: 1089:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTTG CTTTTCCTC ATATTAAGCT TATCTAGCCC 60  
 30 TTTCAATTTTA TTCATACCTG GAATCATTTT CATAATATCA TCCAGTGGTC CTAGATTTTT 120  
 CACCyGWTCA AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTT 180  
 35 CTCTAAATCT TTTGCTTTTT CTTGATCCAC ATCTTGTTGC GCTTTTTTCAA TTAAACTTAA 240  
 CACATCACCC ATACCTAAAA TACGTGATGC CACACGTTCA GGATGGAATA GCTCTAAACC 300  
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTT TGTGTCACCG AACGAATAGA 360  
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420  
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480  
 AACTAACATA ATTCGTTTG GTTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540  
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600  
 TCTTTAGCAn GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

## (2) INFORMATION FOR SEQ ID NO: 1090:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60  
 TTAAC TCATT ATTAGGGCGG TAATAAAATG AACATTCGCC AAGATTTAGA AAAAATGGTT 120  
 ACAAAGCTAT GAAGCAAGTA TAAGTGCTTT TGGAAGTAAC TATGACCGCG CATTGAACTT 180  
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

## (2) INFORMATION FOR SEQ ID NO: 1091:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

20 GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60  
 AACATTTAA TCCAGTGGA GATCGTTTCG TAATAAAAAA ATAATCAATA TATTGTTAGG 120  
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTGTAGTT CTTACACATT 180  
 AGCCGCTGCT AATnGCAACT TAAGAnTAGG TT 212

## (2) INFORMATION FOR SEQ ID NO: 1092:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60  
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120  
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTAAACACC TAATTCTTCT AGGCCTAATT 180  
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

## (2) INFORMATION FOR SEQ ID NO: 1093:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 902 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double
- 55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5 CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG 60  
 TATTGATTTA CCTACCCTTA TTATGATTTTCA AATTTTTTCA TTTGTGATAT TTGATAGTGT 120  
 TGAAAATATT AATAGTGCTG CACACGTACT TGAAATGATA GATATGACGA TAGATGATAT 180  
 10 TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAATTTGA CGATTAAAAA 240  
 TGAAAATATC GCTTTTCAAA ACGTGAACCTT TTCATATGAT GATAACAAG TGATAAAGAA 300  
 TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG 360  
 15 GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCG 420  
 CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCGA AAATTAGTGC 480  
 AGTATTTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA 540  
 20 TCCAGGTGCA ACGAAAGAAG AAATTATTCG TGCCGCGAAG CAAGCATGTT GCCACGACTT 600  
 CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC 660  
 TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT 720  
 25 TATTTTAGAT GAAGCAACTG cAAGTATTGA CCCTGAAAAT GAACAGCTGA TTCAAACGGC 780  
 AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAACTAT 840  
 30 TAAAnATGCA GATCAGATTA TAGTGCTCAA TGnAGGTGAA ATAATTCAA AAGGTAGTCC 900  
 TG 902

## (2) INFORMATION FOR SEQ ID NO: 1094:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 632 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTTTATAC ATGAAAGCAC 60  
 45 TAATAGAATC GATTCATTTA AACATAAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA 120  
 TACCAATTGT GTATGGTTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AACATTACA 180  
 50 AAATCAAGCT AGAAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA 240  
 TGGGATATTC ACCTGGGTTt CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC 300

55

GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420  
 CACTTTTTTAA TCCGAAAGAA TCAGATTTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480  
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540  
 GAAAAAAGTG GCTTATTCAG TAGCTTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600  
 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632

(2) INFORMATION FOR SEQ ID NO: 1095:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60  
 ATACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120  
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGA AGCTGGTGCh ATATATTnCG 180  
 CCAATAATAT GATGGATGGT TTGTTGCTGA AA 212

(2) INFORMATION FOR SEQ ID NO: 1096:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAACTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTGC TGAAGAATGT 60  
 TTTTGTAGAA CCGgCTTAAG AATTTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120  
 GATACTCAGG ATGAATTCCT TGTTcATTAT TTTCAGCTCC TTGCCCCTGA ACCATCTGGA 180  
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240  
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTCGA CCCGTTTTAG TACTTTCTTC 300  
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TtCATTATTC TTAGACCTTT TAAGTTTGCG 360  
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420  
 GTCTAATTCA GATTTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 208 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

TTTTGATTCA ATAGGCGGTT CCGTGTTATC ACTGACAACT TTAGTTGTAG CTTTCATCTTT 60  
ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT 120  
CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCTT TATGTGATGC TTGATTGCGT 180  
nCCCTTACTT TTTGAATAGG GGTAGTAA 208

(2) INFORMATION FOR SEQ ID NO: 1098:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 571 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA 60  
GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT 120  
TCTACAGCTT CATACGTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTCG 180  
CCGTCTGAAA ATAnGATTAA AAATCGTTGA TGTTGATTTT GACGCATTAA TCGTTCACTT 240  
GCAACTCTAA TAGCAACACC ATCAGGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT 300  
GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCATTAAT GATATTTGGT 360  
TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAATTTT ATGTTTAATG 420  
TTCAATGCTT TTAACGTCTC GTGGAATAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA 480  
TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATThAC 540  
TTAAATCTTG TTTTTTGTA AACAATTTAT A 571

(2) INFORMATION FOR SEQ ID NO: 1099:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 214 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60  
 5 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120  
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180  
 10 TTGATTTGAA GGCCGGACCA AATTACCAn GGAA 214

## (2) INFORMATION FOR SEQ ID NO: 1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTTCTTn TCTTAATTTA TCATCAGCTA 60  
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTTAC TGGATATTCT TTTCTTTAC 120  
 25 TACGTGAGTA TCCTnTTTTA TCTTCCATA ATTCCCTCAC AATAAATTCA CCTTTTGTCTG 180  
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTCCATTG 240  
 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTCTT 300  
 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360  
 ACGTTTTGTT GAAGTTTTCT TTAATTTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTC 420  
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAAATACAG CCAGAGCCTC AACCTTTTTG 480  
 AGTGAATCAT CATTTACAT CCCCATTTTT ATTTTTGATG CAAAGTTAAG TtCAAATTC 540  
 AATATTAATA ATATTAGAGG aAAtTTtATG ATTAAaTCCT CGTGGATTtT AATTGTTAGT 600  
 40 TGTATTTTTT ACATATCAAC ATCACAAATT ATTTAAAAAG CGCAAATATC TTTATAATTT 660  
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATTGCGC TTATATTTAA AATAATAACA 720  
 CTGAAACTCA ATGTATTTAC TTATTAAAAT TGATGTTTAA ATACAACTTT ACTAACATTC 780  
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCAtCTCTTA CAGCTTTATC 840  
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTGCGC ATTTTATCTT GCTTTTCTGA 900  
 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960  
 50 CTGTACAAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACTTC 1020  
 TTTTGATTCT AGCGTTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

TGGCATTCTCT TGGCTTTT

1158

## (2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 353 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT 60  
AAATTTTGTA AATACGTGGT AAACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA 120  
ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA 180  
ATAATCAGTA ATCCAAATGA CAAGGGTTGT CGCCAACCTTA ATGGTAAAAA CTGACCTAGA 240  
TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTAtT 300  
GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTG TATTTTGCGA CAA 353

## (2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 194 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA 60  
CCCCGTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC 120  
CAATGCCCAC GCAACACGGG ATGCCCCACC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG 180  
CCATCGCTTC GnTG 194

## (2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 220 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120  
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTTACTTTT CGTCTCACTG 180  
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTT AAAGATAAAA GCGATTTATG CTACTACGTC ATACAAAGAG 60  
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGAATATCAT TCTAATTATG 120  
 AGGTTATGCA AGTGTGCTCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180  
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60  
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AATAGCCCTAT 120  
 40 ATTTCAGGCT CTATAAAGA GGATATTACG ATGTTTAAAG ATATAGAAAA TAATACTAAT 180  
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

rAATTAAAAT CAAAATTTGA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAAGTTT 120  
 ATTAATGGTG AAATATTAAA GCAATTTTGC GATAACTATT ATGACGAATT TGaAGACCCT 180  
 5 TTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT 240  
 TCTAATACGA TTAATAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT 300  
 CATACAGCTT TTGrAAAAC TCTATATTT CCAAATATGA ATTTACGAAT GTGGGAAAAT 360  
 10 CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA 420  
 AATATTTTCAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT 480  
 15 GGAACCATAT AAAGTTCTGG gAATTCATTT GaGATTAGAA TATGGAAAAT CaTAAAGCGC 540  
 GCKATTGATT AGTTTAATGA ATGATTGGAG TCnTTTGAAG ATnCGATTTA CAATGG 596

## (2) INFORMATION FOR SEQ ID NO: 1107:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 673 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

ACTAGCTAAA AATAATATTC TATTCTTTTT AACATGGGCA GTTCCAGCGG CAATTAGTGG 60  
 30 TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTAAAT TAGTATTTTT 120  
 CATATTTTCT GTTTCATTTA TTTTGTAAAT TTTAATACCA AAACCTTACAG GTGAGATACC 180  
 35 TAGCTATATC AATTTTGGAC TTATGAACTA TCAAAACGCT TCGTACCTTT CAGCATTTAC 240  
 TGCCGGATTA GGCATTTATT TCATTATGAA AGGTTTCAGTT AAACATAAGT GGATATATGT 300  
 TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT 360  
 40 TTTATTAATT CTTTACGGCT TATTGTCATT TATACTTATT ACGTTTAAAA GAGGAATACC 420  
 TATCGCAGTA AAAAGCATTG TGTATATTTT TGCATTAAGC ATATCTAGTG TATTGATTTA 480  
 CTTTCTTTTT ACAAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT 540  
 45 TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTC 600  
 AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAACATtA TAAACTAATC GGAAATATAC 660  
 50 CACATAACAG CAT 673

## (2) INFORMATION FOR SEQ ID NO: 1108:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

	TCACAGTGGC GGCACAAAAA GTAAGTGGAG ATTATTTTAA TTTAATTGAC CATAACGATG	60
10	GCACAATGAG CTTTGCTGTT GCAGATGTCA TTGGAAAAGG TATACCAGCT GCTTTAGCAA	120
	TGAGTATGAT AAAGTTTGGC ATGGATTCTT ATGGACACTC ACAATTACCG AGTGATGGTT	180
	TAAAACGTTT AAATCGTGTT GTTGAAAAGA ATATTAATCA AAATATGTTC GTCACAATGT	240
15	TTTATGGTTT ATATGAAGAA ATGAACCATT TATTGTATTG TAGTTCAGCT GGTCATGAGC	300
	CTGGATATAT TTATCGCGCT GAAAAAGAAG AATTTGAAGA AATTTCAAGT AGAGGTAGAG	360
	TGTTAGGAAT CAGTTCACAA ACACGATATC AACACAAGA AATTTCAATA TACCTTGATG	420
20	ATTTAATTAT CATTTTAACG GATGGTGTGA CTGAAGCTAG AAAAGTGAAG GTACCTTTAT	480
	AGATAAACAA AAACCTTTAG AATATA	506

(2) INFORMATION FOR SEQ ID NO: 1109:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 552 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

35	TGATATTGAA AAAGATGTCA TTGTTAAAGC ACAAGAAAGT AAAATTGCTC AAGTTATCAC	60 <sup>4</sup>
	GAATTTGTTA ACGAATGCAA TTAACATTC TTATGAAGAT GGAGATATTA ACGTTCGTGT	120
	GTATCGAGAT GACTTTCGTG TCATTTTCGA AGTACAAGAT TTTGGTATAG GTATTAAATT	180
40	AGAAGACCAA CAACGTATTT TTGAAAGATT TTATAGAGTA GATAAAGCAC GAAGTAGnAG	240
	ATTCTGGTGG GACAGGTCTT GGATTATCAA TTACAAAGCA TATAGTAGAs GCCCACCAG	300
	GCAATATTGA AGTGAATAGT CAAGTTGGCA AAGGCTCAAC GTTCAAAGTT ATTCTAAAAG	360
45	ATTATAAAGA ATAAnAATTA AAGTGGTAAC AGCGCGTGTA TTTTTCACGA AGTTGTTGCT	420
	GCTTTTTTAT TTCGTTCAAA TCTCTATTGG TATTAAATTA GAGTTAATGA AGTGGAATAA	480
50	ATTCGGTTGT CAATTTTGTC ATTTGTATAT GTCGATTGT AAGTTATAAG TAATAGATTG	540
	TTGTGAATCA nG	552

(2) INFORMATION FOR SEQ ID NO: 1110:

55

(A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60  
 GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120  
 TTTTACAACG AnATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180  
 15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240  
 ATTT 244

## (2) INFORMATION FOR SEQ ID NO: 1111:

20

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 825 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTGTATT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60  
 AATACTTTTA TTTTGGTACT CGCAATTTAG ATTTGTTAAC TAATTTTTTC GCTTATTATA 120  
 AAACGAAACA ATCAAGTAAA CGATAAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180  
 35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTTGTAGG AAAATmCCAA TGATAATTGC 240  
 GATAATTACT GCAAtTaATG TGACTGTATT TTCATTTGAA ATGTTcATtT ATttTCACTC 300  
 CTtAACAATA ACATTATATC ATGCTATAGC TTTCCAAAT ATTGAAATAT GTAGATATGG 360  
 40 CTATTGACGA TATTTCTTAA CTTTTATATG ATTAATCGGA ATGAAAAAAG AGAAGTAGGT 420  
 GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480  
 GTATTAGCAT TTCAATTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540  
 45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600  
 ACATTTATTG CAAATCAAAA TGGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTGATACG 660  
 CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTG GCAAAGAAGC ATCAAATTAT 720  
 50 AGTAAGAAGA CATTAACAAA TCAAGATGTT TATTTAGAAT ATGATAAAGA AAACCAAnTC 780  
 GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

10	TCCCTATAAA TCCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTTCAT CTCTTTATGC	60
	CAATCAACGA TCGATTTACC TTTTAAAATT TAAAATGTAT CTGTAATACT CTTAGCAATA	120
15	TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG	180
	TAACGTTGTA ATGGTCGATT CATTTCTAAG CTTTTAGCAC CAACTATTCT CATCGCTAAA	240
	TCAATCACTT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACTTGT TGGATTTCTT	300
20	ATCTGACTGT CATCTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC	360
	GCACATAACA ATAGCGTTTC CATTTTCCCT AAATTTTGTT GCACAGTTGG CAATGTTGCA	420
	ATCGTTCCTT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA	480
25	GCAGCTTGTG CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTTGGCGCT	540
	TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAA	600
	TCATGACTTT CTGTCGCTCG C	621

(2) INFORMATION FOR SEQ ID NO: 1113:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

40	GTACCTTGTT TTTCAGTGTT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT	60
	GAGAAGTACT TGAAGGCACC TTCACTTGTA ATCATGGCAC GTTGTCTTC TGGAATGTCA	120
45	TTAAATTTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATTG AGCAATGTAT	180
	TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT	240
	TGAATGTTTT TTACGTAATT AATACCGTTA TCTAACTTA ACCATGCGTG TGGATCTTGT	300
50	TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG	360
	ATAACTTTTT TATCTTTTAA TGATTTACCA GCCTGTTCTA AGGCTTTTTC AAACCAACCG	420

ATATCyTTAG GTTtAACyTC aTAWTCaTGA GGATCTkGAC CAACAGGTAC AATACnATGA 540  
 ATATCGACGT TGTCTCCACC AACATTTTTA GCCATATCAG ATAGAATTGA ATTCGTCGnT 600  
 5 ACTACTTTnA ATTTGCCAT 619

(2) INFORMATION FOR SEQ ID NO: 1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAAAACCGCA CGACAATGAA AAAAGATATC CGGTTAAAAAT GGTCGATAAT AAAATCATTTC 60  
 20 CAACAAAAGA AATTAAAGAT GAAAAAATAA AAAAAGAAAT CGAAAACTTT AAGTTCTTTG 120  
 TTCAATATGG TGACTTTAAA AATTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180  
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAATAA TGATGATTAT AATGTAAAAC 240  
 25 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300  
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360  
 AAAAAGAgGA AAATATATAC TTTAGTGaTA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420  
 30 AATCATGGCT CAATCAGAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480  
 AACGTGTAAA TAAATTAGTG CTTGGTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540  
 35 GCTGGTTGT 549

(2) INFORMATION FOR SEQ ID NO: 1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60  
 TAAAAAAGGT TTAGTGGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120  
 50 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180  
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240



TTATCATCTT CGATGAA

317

(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC 60  
 TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTCATG GCTTGCCTTA TTTTATTGTA 120  
 TATTTTTAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA 180  
 GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG 240  
 CACCTGAAAC ATAATCATG AATAAAGAA NATGGTATAC CATTAAATnTG AATCCATTTC 300  
 CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG 360  
 AAACTTTACC CATACGAGAC ATCATGGATA AAAGCGAGGC 400

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 696 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT 60  
 TTAATTTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT 120  
 GCACTAAGAT ATATCACAGC TAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT 180  
 GACTTATATT TCCGAAATTC TTTTAATAAA ATAATTAAAA TGATTACATG TATCGTATAA 240  
 ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCTG CGCCGAAACA 300  
 CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA 360  
 TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA 420  
 ACCAATCCAA TATCTGTATT TTTATTTAAT AAAAAGTATG TGATAAATAG TAAATAATAA 480  
 AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA 540

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTTCTGC AAATTTTGAA 660  
AAGATACCTT GATTATTTGA AACTTGTTGA TATTCT 696

(2) INFORMATION FOR SEQ ID NO: 1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAAG AGAACGCTCT ATAGAGACGA 60  
ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120  
CTCAGANTAT ATTAAATTAA AACCGTCATT AATTGTTTTT CCGAAAACCA TTTGTAACCA 180  
TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

CTGCTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60  
AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTT CATATA TGAATTGGAA 120  
TTATTTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG CTGCTGGAGA TGGCGGACGC 180  
GATGGATATG TTCTGCCAAG GGTGGTTTG CGCATTCACA GTTCTCCGCA AGAATTGATT 240  
GGCTCCAATT CTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

CATGACATTA CATGCTTATT TAGGTAGAGC GGGAACAGGT AAGTCTACGA AAATGTTGAC 120  
 CGAAATAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATT TAATTGCGCa 180  
 5 ACTCAAAGTA CATTTCAATT AGAAcAAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240  
 TTAAGAACAG AAGTGTGCA TTTTGAACGA TTAAGTCATC GTATTTTcCA AGAAGTTGGT 300  
 AGTTATAGCG AACAAAAGTh ATCTAAAGC 329

10 (2) INFORMATION FOR SEQ ID NO: 1121:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTTAATATAT GTGAACTATA TATAGTGTAT AGAGAGGTTA CTTGTTACTC 60  
 AATATAACA AAAATCAACT TTGTCAAAT AAATGTGACA AAATTAAATA AAGTGTGATC 120  
 25 AATGTGACAG TATAGATCAT TTTGCAAAAA GTCAAAACAA AAAAAATTGTT TTAGGGATTT 180  
 TTCAAATTT TCATTGTGGA AAATGATTTG nCAAAACAA ACAACACnTT GTGAGCAATG 240  
 AAGCTTCAAT GG 252

30 (2) INFORMATION FOR SEQ ID NO: 1122:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60  
 CTTAATACAA TAACAAGTAT TGTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120  
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAATT TCATGATTCA ATCTCTCCTT 180  
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAT CAAnATATCT AATGAAGCAT 240  
 CTTTTAATCG TAAGTGTTAA ATGGTTTtCT TAATCAATTT GTTTGAATGT ATAAAnAGCAA 300  
 50 TTAAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360  
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 270 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

AATACAACCT TTTATCATAG TGTAATGTA TTCTACCACT ATTGAGAAGT TTTTCATATTA 60  
TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC 120  
AACACAACTT TAAAAATATA TTCTAACTCT ATCTACGAAT GTA CT TAAAT ATCATAACAA 180  
TCTATTCCAA ATChAATTAC ATTATTAGCT ACCTTAAAAA CCAAACCGAG GCCTTAGGCC 240  
TCGGTTTAAA TATATATAAC GnGCGACATG 270

(2) INFORMATION FOR SEQ ID NO: 1124:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA 60  
AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA 120  
TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA 180  
AAATTTAAAT GAACTTAGGC ATAGA AACTCG AAAAGAAAAT GAACGTAGTT ATGATGTTTT 240  
TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAAA TGACGAGAAA 300  
TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG 360  
AAGAATATAA AGAAGACTTA AAAAAGTCTT ATGAAAAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1125:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 377 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

AAATATATC GATCATTGAT AATATGTGCT TTAATATTCC AAATAACTTT CAAATTTTGA 120  
 TAATATTTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTG GCCATCGACT 180  
 5 TTCACATATT TTTGAATACT ATTTCCAAyT TtAAGACGTG TTGGTTTCATT TACAAAATGC 240  
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300  
 10 TATTTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360  
 nCnTGTAAG TACAATA 377

(2) INFORMATION FOR SEQ ID NO: 1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTG TGTTATATCT 60  
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACTTGAAC 120  
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TThAATTGTT GGCCAACTGG TTCTTATTTT 180  
 30 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

(2) INFORMATION FOR SEQ ID NO: 1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 717 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTTGTACGAA TATAATCTAA AACTTCGAGT 60  
 45 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTTAACCACA TTAAAGGAGT ATGAATGnCA 120  
 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180  
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCTG TAATAATATG CTTAGCCCCA 240  
 50 ATTTGATAAG CFAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGAACAAAT 300  
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTTGTGT TAATGCGTTT 360  
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTTCATTCC TTGATCTTGT 420

AGTTCAACTT CTTTGAAATG TTTTTTTGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540  
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTTAATACAC TTTCCATTTT GTAATTGCTC 600  
 5 CTATCATTA TAATATTAAT AAAGAGGTTA ATGGCATTGA TAAGCCCGTT TTTAATTTAT 660  
 AAAATAAAAA AAGCCnATCT CCATAAAGA TAGACGAnAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 595 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

20 GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCCGG 60  
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120  
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAAGTTCTGA ATAGGTAGAA CGATAAAGCA 180  
 25 AGCCTTTTCT AAAGCAAACA AAAGTTCATT CCTAACAATT TTTGATTCTA ACTTAACAAC 240  
 AGTTATCGCC GCAGCAGTAT TATCTTCTT CGGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300  
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTTACAGCC GTGTTCTTAT CAAGATTCTT 360  
 30 ATTATCATTA CTTGTTTCAT CAAATATATT CAAAAATCAA TTTTGGTTAT nTGGTGTAA 420  
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AAAGTTCATT 480  
 35 CGAGAAATGG AATTTTGTGA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540  
 AGTGTCGGTT AGTTATTCTnT TATATCTCAA GTAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

50 ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTTCTT AACATATCAT GTTCTGTTAC 60  
 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAAATGA AAAGCGTTGG CTTAATCACA 120  
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACCGC TGTTTAGTTT CGGACTACCA 300  
 GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGCGTA 360  
 5 CATGCnTGGn G 371

## (2) INFORMATION FOR SEQ ID NO: 1130:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAAACAnA 60  
 20 nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTTGCAGCT GGTGGCGTTG CGACTCCTCC 120  
 AAGATGCTGC TTTAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGGAATT 180  
 TTAAAACCAG AAGATCCCGG 200

## (2) INFORMATION FOR SEQ ID NO: 1131:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGGCATTAAA TGCAATAAAT 60  
 TAAATAAGTT GTCATTAAAG CATTATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120  
 40 AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTTG GGAAACCAAT 180  
 TTATCCnTGA ATCGAGATGT nGC 203

## (2) INFORMATION FOR SEQ ID NO: 1132:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:

ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTTA AGTATTGTCT 120  
 CTAACAACTT AGCACGACGT CTTAACCCTT TAGTAAACAA TCCTTCTTTA GntTTTAGTAC 180  
 5 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAACTGT TTGTAAGCTT ACGTTGACAA 60  
 20 TCTGGCGTAA TTGGAAAAC TATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120  
 TAACAATTcm AATAATATGr AATCACAAAg CGACTAGAAA TCCGGTAATA TGAATAATCA 180  
 TATATTCAAT GTGTAAaTAAT TTAAACAGCA ATAAATAGAC AACATAATAA TTAAACGTAT 240  
 25 TAATGCCGCC AACAAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300  
 GTGTACTCCT CAACATCanA ATATATGCAT AACTACGTTT TCGAACATAC TCGAATATGC 360  
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTTCAATCT TTATACCCTT TCACAGCAAT 420  
 30 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480  
 TTGGC 485

(2) INFORMATION FOR SEQ ID NO: 1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60  
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120  
 50 TAAAATATTA rAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATT 180  
 TTCATTTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:



- (A) LENGTH: 526 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

10 TGTGACTCCA TGTATTCATG TATCATTGTA CATTTGTGAA TTGGTTGAAA ACTGATAGTG 60  
 CCCGTTTAAT TACAGGTACT GAGGATGCTT TCAGGACATG GATTTGTTCG AAAATATGAC 120  
 AATATTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA 180  
 15 ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAAACTTT GCATAAATTC GTAAAAGCTC 240  
 AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA 300  
 TTTTaCATAA AACTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA 360  
 20 AGTTGTGTAT AATGAAATAA ACGTGTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA 420  
 CATATGAAAT ATTTATTGA AGTCGTTAAG CAnGGAGGCA TGACTAATGC TTCCAAATCA 480  
 TTATATATTG CACAACCTAC AATTAGGAAA GcATTAAAG ATATTG 526

25

(2) INFORMATION FOR SEQ ID NO: 1136:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA 60  
 TCAATATGAT AAACAACGTG TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCTTC 120  
 40 TAAAGATTTA CAAGTTTTAG CTATTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC 180  
 CACAAATGAT AAAAnATGGA AGATGTTTCAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC 240  
 45 AGCAACTTTT CCAAnATTTAC CCAGGTGTTT AACACGTCCT ATTGGATTTG GGCTTAGGAC 300  
 AATTATTCCA TATGGGCGGA T 321

(2) INFORMATION FOR SEQ ID NO: 1137:

50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

ATAAATCCTT ATAAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTTCAGTT 60  
 5 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120  
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180  
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAAa TAATTtATAA AGTnTGTATA 240  
 10 AGAnCTGTAT AAGGTGTTCTG AACATTGTAA ACACTCATGC TTCGGACCAA ACTCATGGTG 300  
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

## (2) INFORMATION FOR SEQ ID NO: 1138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

25 CTTGATAAGG GAAGATTTGC CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60  
 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120  
 ATCTTTTGTT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180  
 30 ATTGTATAAT AAACGTGAGAA TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240  
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300  
 TACGAATAAT GGCATAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360  
 35 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTTGAAAC 420  
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

## (2) INFORMATION FOR SEQ ID NO: 1139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

50 TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGTCAT 60  
 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

## (2) INFORMATION FOR SEQ ID NO: 1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60  
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120  
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCACACA 180  
 GCAGGAGCTG AATGATGACA ATTCATGAAC ATAA 214

## (2) INFORMATION FOR SEQ ID NO: 1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60  
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAATCTA GTTGTGCCAT 120  
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180  
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

## (2) INFORMATION FOR SEQ ID NO: 1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60  
 TTTGAGATna ATGAGTGTTA TTAACCACTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120  
 GTTTATAATA AGAAGATTTG ATAATTAECT ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTTAGTTGTA 300  
GCAGTAGCGG G 311

(2) INFORMATION FOR SEQ ID NO: 1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAACT 60  
GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAAGAACA 120  
CTTGAAGAAG TTGGTAAAGT TTTCGGTGTT ACACGTGAAC GTATTCGACA AATTGAAGCA 180  
AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240  
TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTTAA 300  
GATTAAGATT TAACCTGAGT GAGGTTGGTA CATTGAATAA TGTTCAACCT CTTTTTTCAT 360  
AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

(2) INFORMATION FOR SEQ ID NO: 1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

nTTTTTATTG ACGAAAnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCTT GAATGGTAAT 60  
CGGTATTTTG AAGTTGTCAT GTGCTACACG GTAACCGATA CnATAAGTA CGAGTGCGAT 120  
GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTGC TTGAACACAA CAAGTTGTAT 180  
ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240  
ATGAAsCTAA GATAGAAACT AGGGTGCAGT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300  
AACAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AAACACCATT TGCTATATGT 360  
TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420  
ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

AAGATATTCG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600  
TAAAACCATG Tn 612

(2) INFORMATION FOR SEQ ID NO: 1145:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 223 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAAA TCAGTAATCG AAAAATATGC TTTAAAATAA 60  
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT NAATAAACCT TTGAGTCACT TCCATTTTTA 120  
AAnGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTTA ATGAAAATAG 180  
CCATTAAATG ATTTGGAAAC GGTAAGAGGG GGTATTTTAAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 598 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTCGTTTTA GCAGTCTTTT TTATTGAAGT 60  
AGACAATGCA AGATTAAATG GTAGTGT CAT TTCATTTTAT TCAACTGCTA GTAATACAAT 120  
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAAACTGTGT 180  
ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240  
AAAAACAAT AGTGATTTTC CGATTTATGA ACAGATTAAG CAACAAGTAA AACAAAATAT 300  
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTTGCCGTCA ATGAGAGAAC TTGCCAAAGA 360  
TCTTCAAGTA AGTTTGATTA CTACCAAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420  
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480  
AGAGAAACAA TTTTTTACCA TGAAAATTG GGTAAAGGA ATTGGGTTAA TTAAGCnCAA 540  
GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTCAG 60  
 CTTGAACTGG TTTGATTTGT AACTGTTCTG TTAGAAGTTG GCGTTCTTCT TTAGTGACTG 120  
 AATCAAAGTC TCCCACTGAG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180  
 15 CTCTATCAAC GCCGCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TCGCGCAAGT 240  
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACACTCA ACCTTTCAAT GCTTGTGTGA 300  
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360  
 20 TCAACACCAA CTTCGGCGGA TCnGGATTAC GCCTCCATCC 400

## (2) INFORMATION FOR SEQ ID NO: 1148:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 352 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60  
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120  
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAYtGTGAAT TATCTTAAAC ATAAGTTTTA 180  
 TAACTTGTTA ACTACAATGA TTGTCTCTT TATTTTTGTA CTTTCTGGTG CGATTTTTTT 240  
 40 AACATTTCTA GGGTTTGGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300  
 TGACTTTACA TATAATAGAA GTATGTACGA TAACCTATnA TATTATGGCA GT 352

## (2) INFORMATION FOR SEQ ID NO: 1149:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 916 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

55

GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT 120  
 TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA 180  
 5 GCACCATTTT CAACACAAAC TTTGCTGTG TCGGTATTTA CGCCTCCATC AACTTCAATA 240  
 TCAAAGTTTA ATTGACGTTT CATTTTAATA GCATTAAAGAC CCGCTATTTT TTCTACGCAT 300  
 TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA 360  
 10 ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA 420  
 GCTTTTTTAT CTAAATGTTT AATCATTTGA ATAGCACGAT GAATATGAGG CGTTGATTCTG 480  
 15 ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA 540  
 TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT 600  
 ATTGGTAAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT 660  
 20 CCGTCGACGC CTGCTTCTTC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA 720  
 GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CCTTTCTATT TGAAATTTCA 780  
 TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATCCCTAT CTCTAATTGA 840  
 25 TGCnTAACCA TTACCATTAG GGTCCCTGGn AAGGnTACCA ATCCCAAACC TTACCATGGT 900  
 TCCCCCATAA CGGTTT 916

## (2) INFORMATION FOR SEQ ID NO: 1150:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

40 AATTGTTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACAAACATCG TTTTCTAAGC 60  
 CTACGATAAA GACATAATCG TTTTCGGTTT TGTGTTTTTC TAATGAGCGT TTGATGATAC 120  
 GTTTATCTTC AGTTAAAGAT AAATTTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT 180  
 45 AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATTCCAT AAGAACACCT CCCCAATTTA 240  
 AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAAACTTT TAAATGGTAT 300  
 AAAAaACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT 360  
 50 AACTAAGCtT TGGGACCTTT AGATGCnTTC ACAAATGTG 400

## (2) INFORMATION FOR SEQ ID NO: 1151:

(A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60  
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120  
 ACCTTTTAGA GTAATCCAAA CAAAACTTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TATTTTCTAA TGTTAGCATT AGACTGTCAA TTAAC TTGCT AAGTTGTTCT 60  
 TTTT TAGTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTTTTTC ATCTAGCATT 120  
 30 AAAAGGTAGT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180  
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTAGT GAATCGTTTT TTAAAGTAA AGAGAATTTTC ATATATTACT 60  
 GGTACAATA CAAGTGTTAA TAAAGTTGAT GAAATTmAAC CACCAATAAC TG TAGCAGCT 120  
 AATCCTTTTCG AAATAAGAAT CGnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180  
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAAT 240  
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300  
 GCATTTGTTA CTACGATnCC AATTCAACAT TAGCATACC 339

55



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60  
 TTGGTTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120  
 CACCTGAAGC GCAAATAAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAG 180  
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTC TGAAGAAGCA AAAGTATACA 240  
 TTAACATATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300  
 TACATAAAAT GAATAAGAGT AAGACCAGCG TagCTTCTTA TATTCAAACC AGATCTGGTC 360  
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420  
 TTACTGCACC TACCAAGCAA CCAATTGTTA AACCGAAAGA AAAAACAAAA TATGAGTTTA 480  
 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540  
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600  
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660  
 ATTTTGAAGA aGCAAATATA TCTGTAAC TTAAAGGCGA TACAAAATTA AATGaTAGTT 720  
 CTAAAAAAGT AACTATAAAT GaCCATGAAA TGGCATTTC AAGTTCCAAA ACGTATGGTC 780  
 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

## (2) INFORMATION FOR SEQ ID NO: 1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

AnAGAAAATC TACTCTTTTA TTTCAACGGT CCTTTChTAT CTCTCATTG GCATACTCCT 60  
 TTTTCCATAT TTTCCACTTT CAnTACAGTG AATTTACATG TAATTTTACA AATACAATAG 120  
 GAGTGCACAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180  
 AAAACAATCT ACAAAATAAAA TTATTATTTT TAGTTTTCAA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

## (2) INFORMATION FOR SEQ ID NO: 1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 777 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

GTTTCCAAnG	GAAnGnGAAA	AGCGTCAACC	AATGTAAC TA	TTTAAAGTCA	AAGTGTTTGA	60
CCAAATTTGA	CTTAATATGT	AAAATAATGA	GTAACAGTTA	TTACAAGGAG	GAAATATAGA	120
TGAATTTAAT	TCCTACAGTT	ATTGAAACAA	CAAACCGCGG	TGAACGTGCA	TATGATATAT	180
ACTCACGTTT	ATTAAAAGAC	CGTATTATTA	TGTTAGGTTT	ACAAATTGAT	GACAACGTAG	240
CAAATTCAAT	CGTATCACAG	TTATTATTCT	TACAAGCGCA	AGACTCAGAG	AAAGATATTT	300
ATTTATACAT	TAATTCACCA	GGTGAAGTG	TAACAGCTGG	TTTTGCGATT	TATGATACAA	360
TTCAACACAT	TAAACCTGAT	GTTCAAACAA	TTTGATATCG	TATGGCTGCA	TCAATGGGAT	420
CATTCTTATT	AGCAGCTGGT	GCAAAAGGTA	AACGTTTCGC	GTTACCAAAT	GCAGAAGTAA	480
TGATTACCA	ACCATTAGGT	GGTGCTCAAG	GACAAGCAAC	TGAAATCGAA	ATTGCTGCAA	540
ATCACATTTT	AAAAACACGT	GAAAAATTAA	ACCGCATTTT	ATCAGAGCGT	ACTGGTCAAA	600
GTATTGAAAA	AATACAAAAA	gACACaGATC	GTGaTAaCTT	CTTAACTGCA	GAAGAAGCTA	660
AAGAATATGG	CTTAATTGAT	GAAGTGATGG	TACCTGAAAC	AAAATAATTC	AAAGTAAAGA	720
GTAGACTAAG	CnGTCTGnCn	TTTTTGTATG	AGTAAACCAA	GGTGTCAATA	ATTTGTn	777

## (2) INFORMATION FOR SEQ ID NO: 1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

TAATGTTGGT	AAATGGGTTA	AGGCTCAAGG	TCGTATTGAA	GAAGATACAT	TTATTAGAGA	60
TTTAGTTATG	ATGATGTCTG	ATATTGAAGA	GATTAAAAAA	GCGACAAAAA	AAGATnAGGC	120
TGAAGAAAGC	GTGTAGAATT	CCACTTGCAT	ACTGC			155

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT 60  
 TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTATA AAAGATGAAA AGGATGACAC 120  
 AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAAACGTT 180  
 GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA 240  
 AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAAATC AAGAAAATAA 300  
 TCAAGATCAG CTTAAAnAG ATATTGATGA CAAAnAAGAT AGTCAAAAAT CAGATACTAA 360  
 GGGAAAGACG TACTAGCCTT TTTACTGGAA AAAGGGTTTA 400

## (2) INFORMATION FOR SEQ ID NO: 1159:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA 60  
 TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA 120  
 ATAAACAAGA CGCAAATGT CGsATATAAA AATGAATATT TTTATATCAC TTACTCGTCA 180  
 AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsa TTCATAAAAA TGATAAAGAA 240  
 TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT 300  
 AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn 347

## (2) INFORMATION FOR SEQ ID NO: 1160:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60  
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120  
 5 TCGGGGATAT GAGCAATTAA CTACTGCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180  
 GTTATGATCA TCTGTATGTG GTG 203

(2) INFORMATION FOR SEQ ID NO: 1161:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTTCCnT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60  
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTTG GAAAATTTCC 120  
 25 TACATAGTTA CTCATTTTAA TTTGThCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180  
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTAA GTAAC TAGGA 60  
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120  
 ATTTTAAAA ATGGAAAAAC ATGGACATTh AAATTGGAAT TTCATAATAT GTCCTAATTG 180  
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 409 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCATTT GATTGTAATT 60  
 GGATGCCATA GAGTAATGAT ATGCACCAGT TGATAATATA GCAAGATAGT CTCCACGTTT 120  
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180  
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAGCAAT GCTTGATACT 240  
 10 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300  
 TATTArTCTC TGGAATTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGCtTCAC 360  
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

(2) INFORMATION FOR SEQ ID NO: 1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

25 CTAAATAATT GTTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60  
 TGACTIONGCAA TGATATGAAC TTAATTTTTG CGAAAAAAGG AATCTAGATT CATATATTCG 120  
 30 GTAAATCTAC CTTCTTCATC TTTTGTAACT TGTAATTCTA GCAATTCACG TTGTATCAAA 180  
 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240  
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300  
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATCnCTC GTATCACTAC GGTCTGCTTT 360  
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCAnA 400

(2) INFORMATION FOR SEQ ID NO: 1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

50 TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTCTCGC TTCTGTAGGG 60  
 CTAGTGATAA TCATATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120  
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300  
 GTGAGGATCC GCTTAAAAAA CCCATA 327

(2) INFORMATION FOR SEQ ID NO: 1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTTCT AACATAAAGC TTAAACATT GATATAACTG 60  
 CGATTTTCGAC TTCTAAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTTT 120  
 AAAAAATAATC nGATAAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTTGA AGAAGTATTT GACGACAGAG ATGAAGTGGA 60  
 TTTAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120  
 ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180  
 TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240  
 TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAAGTA ATCCAACCTCT CAAGAAGGTA AATGGGCAAT CAAAAGCTAA 60

CTACGATATG ACGCACAAAT GTTtagGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180  
 AAATGGTTGT ATTCTTAGGG AAGCATTcat CCTGTTTGTt TATGGATTCA TGTTACGTTA 240  
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300  
 TnATAAGCAG ATGAAAnCGG C 321

(2) INFORMATION FOR SEQ ID NO: 1169:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 191 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60  
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAAA TGAATTATGA TAAAATGTAA 120  
 GANAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180  
 25 ATGTTACCAT A 191

(2) INFORMATION FOR SEQ ID NO: 1170:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60  
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120  
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180  
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAA A nAATCGGTT GCCCTCTAAA 240  
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTTA ATATGTATAT 300  
 TAG 303

(2) INFORMATION FOR SEQ ID NO: 1171:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 55 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5 AAAAAGGTGA GAAGACAATA ACGnACGCCA AACTAAAAA ATCCATTAAC TGGAGAAATT 60  
 ATTAGTAAAG GTGAATCGAA AGAAGAWATC ACAAAGATC CAGTTAATGA ATTAACAGAA 120  
 10 TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG 180  
 ATCAAACGGA AAAAGTACCA GGTAAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA 240  
 TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAAA AACGGGTACA CCAGAAACA 299

## (2) INFORMATION FOR SEQ ID NO: 1172:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25 CCATAGCACC ATACCCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATTnACACG 60  
 TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA 120  
 30 CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT 180  
 ACTACTATTT GGTAAAATTG TTAATTCTCC TGAAATTGTA TTGATTCTGT TTGAACGAAG 240  
 TCCAATTGAT TTAAGTGTTC CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA 300  
 35 ATCACCTACA TCAAATTGGC TTTCAAATAT AATAAAGAAT CCTGTAAtTA CGTCTTTAAC 360  
 TATAGTTTGA GCACCAAAAC CTACTGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC 420  
 TTCAACACTA ATGCCAAATT TACTTAAAAT CGTCGTAATA ACTATAAACC AAACGATATA 480  
 40 CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT 540  
 ACTTTTATTT TGAATCTTAA ATCCCTGTTC AATCATTTTA TTCAGTATTT TAATAACTAT 600  
 GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT 660  
 45 TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT 720  
 AAGCGTTACT CCCTTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC 780  
 50 AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C 821

## (2) INFORMATION FOR SEQ ID NO: 1173:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

CCC	GAA	TTA	AAATA	ATAAT	GTAT	GAATTT	TTAA	ATATGA	TTTAA	ACGTT	TTCAG	TTTTTT	60		
10	ATG	AAA	ACGC	ATGC	ATTTTA	CAA	ATA	AAAAA	TGGT	ACGATG	GCACT	GGTTA	AAACG	TTTTTA	120
	CTA	AAAA	ACAA	ATCAT	GAGGT	GTATA	ACATG	GCTGT	CTCTT	GATC	AGATCT	TGAT	CCCC	CTG	180
	CGCC	ATCAGA	TCCT	TGG	CGG	CAAG	AAAGCC	ATCC	AGTTTA	CTTT	GCAGGG	CTT	CCCA	ACC	240
15	TTCC	CAGAGG	nCG	CCCC	CAGC	TGG	nCAATTC	CGGT	TCGCTT	GCTGT	CCATA	AAAC	CGCC	CA	300
	GTCT	AGCTAT	CGCC	ATGT											318

(2) INFORMATION FOR SEQ ID NO: 1174:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

30	GTTT	TAAAGC	GGT	TATAAG	GTAA	ATATGC	AAT	ATTATAA	ATAT	CTTCTT	CAGAA	CTAAC	60
	CGA	TCTCTT	AAAC	TCACT	GTTT	AGATAG	CGTT	TCAAAT	TGATA	AGTTT	TAAT	TTTAAC	120
	CGTT	ACAGTT	TTAG	CTGACT	GCTG	TAAATTT	ATTG	ACGTG	CAGC	TGTTTT	CCTG	ACAATH	180
35	CCAT	ACTGTC	TTAA	A	nCTCT	GCAT	CA						206

(2) INFORMATION FOR SEQ ID NO: 1175:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 653 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

	TCTG	CATCAT	GATAT	TTTAC	ATCAT	CACTT	ATA	AGA	ACGT	CACCT	TACATT	TAA	ACTTT	TCA	60	
50	TCT	AAAGCTC	CAGC	AGA	ACC	TGT	ATTA	ATA	ATG	ACG	TCCG	GTTT	AAACTT	ATTA	ATTAAT	120
	AATG	TCGTAG	AAAT	TGCAGC	ATTA	ACTTTT	CCA	ATG	CCAC	TTT	GGG	TAAAT	CACT	ACTTCT	180	
55	CTAT	CTTTTA	AAAT	GCCAGT	ATA	AAATTTA	ACAT	GTG	CAA	CTG	aAATTT	C	GTTA	ATTGT	240	

TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTTGTTAT TTTATCACAT TTTAATCACT 360  
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAAACT TTTGCTTTAT TTTTATAAAA 420  
 5 AGCTCTTTCA ATAACCTGGT ATCATAAATA ATTATTTTGT AACTCATAAC AGTGAATTCG 480  
 ATGCTTCTAA TTTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540  
 10 TCAAGAAACT TTATTAAATA ACAGGAAAAT GATATGTTTA AAATAATAAT GATGAAATAA 600  
 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

(2) INFORMATION FOR SEQ ID NO: 1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60  
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120  
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180  
 30 AAAACTTTGC AGCATGTCGC GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240  
 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAAGG TGATGAAATT GCTAAAGtAG 300  
 tGAAGCTTgA AAAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360  
 35 ATTAGACaCa ATAGTAAAgG CGAtAGCGAT TaAGAAAGT TAAGTCAGTC 410

(2) INFORMATION FOR SEQ ID NO: 1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATAACTA TACTTACACT 60  
 50 ATTGATGGCA CAAGGTAACCT ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120  
 TAAACCAAGA TAATGGCTAC TACAGC 146

(2) INFORMATION FOR SEQ ID NO: 1178:

(A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10 TGTTCCTGGT GGAACTTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTCAAT 60  
 GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG 120  
 CAATTAATAA TGTACTATCC GTATTTATAT CTATATCGTG GTnATATAAT ATGTCATCAA 180  
 15 CTGGATnTAC GTCAATAGAC CTTGTAACC TTAATATCGC GACAT 225

## (2) INFORMATION FOR SEQ ID NO: 1179:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

TGTACGCATA TGGTATCACT TGATGACCAA TTCACTTTGT CGAGAATAAC GTTATTTAAA 60  
 30 GACATTGATT TAAAGAATTG GTATTnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG 120  
 ACAACAATGA TTTCATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT 180  
 TGACCTGGCC TTTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA 240  
 35 ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC 300  
 TGTGACTGTG GCTGACATC 319

## (2) INFORMATION FOR SEQ ID NO: 1180:

40

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50 TTTTATCTTG GTTTTGAAC AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA 60  
 AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTTCTGTCT TTATACTCAA 120  
 CTGCATAAGT ATTTTTACCG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT 180

55

TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300  
 TTTCAAGTAA CGACGTACTT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360  
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420  
 AAAAATTCCT CCTAAGAATG TTTGTYTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480  
 AGTATATATC GATAAATTCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTTGGT 540  
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAAATTA GTGAAATAAC ACTAAAATTT 600  
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

(2) INFORMATION FOR SEQ ID NO: 1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

25 CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTAAAC TAACTTGTTA AATGTTGCTG 60  
 TATTTTGTGA TTCAACACTG TAATATAGTT CTTCTGACGC TGATGCATTA CTCATTGTAA 120  
 TAGATATTAA AAGACTCAAT ATTATTAAaAC TAATAATAGC GCGCTTTATG ATTTTCATAT 180  
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TGCGACAACA T 231

(2) INFORMATION FOR SEQ ID NO: 1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60  
 45 AACTTAGTAC ATTAAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120  
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180  
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240  
 50 CGGGA 245

(2) INFORMATION FOR SEQ ID NO: 1183:

- (A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

10 AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA 60  
 TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA 120  
 CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC 180  
 15 GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTAAAA GAAAATGAAA AGCAATATCA 240  
 ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA 300  
 ATATTTTTAT ATTACATATT TATCAAGAAA TTAAAAGAA TATAGAAAAT ATTACGAACC 360  
 20 ATTGATACAT AArcaATGAT AAAGAGTTtA AAGAAGGTAT GCAACGAGCT AGAAaAGAGC 420  
 TAAACTATnC TGCTAATACA AATACTGTAG CAACGTTGTT TAGTACGAAT GATGAAAGGA 480  
 ATAGAAAAGA 490  
 25

## (2) INFORMATION FOR SEQ ID NO: 1184:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

35 CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGCATAC GAATTAGAAT AACTCGCGAG 60  
 ACCTATAAGT CTCTTTCCTC ACTAGATAGT TTATACTTTT GGTCnGTTGA AGTCAATAAT 120  
 40 TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC 153

## (2) INFORMATION FOR SEQ ID NO: 1185:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

50 TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTG GTTAGTGCCT 60  
 55

AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

## (2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 143 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGGTTTGC GA TACGTTCTGT CTAAGAAATA 60  
 GCGACGTGCA ATTTTCATATT TTnTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120  
 TTGAACCAGG GTCTATACTT TCT 143

## (2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60  
 TGGTTGTATA TGCAGTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120  
 TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCTG TTTATTAGCT CAGCATGAnC 180  
 ATACAGTTTCG GTCACATAGT GTCAATTCA 209

## (2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60  
 ACCGTGGCAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120  
 ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

## (2) INFORMATION FOR SEQ ID NO: 1189:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 527 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

15	CACCAGGCAT TACCATACCA GCACTCATAC CACCAATCAC KCTCGATAAC ATCAATACCG	60
	AAAAATTGTG GCCAACTGCA AACATAAATT CTGACACTGA AAACAAAATT AATCCTATAC	120
	ATATAATTAA TTTCTTCCCT AATTTGTCAG CTAGCGTACC ACCAAACGGC GATATAATCA	180
20	TTTGAGATAA CGCAAAAGCA GCAACTAGTA ATCCTAAATC ACTACCAGTT AATCCCAAAT	240
	CTTTTAAATA AACAGGCAAG ACTGGTATTA CTAAACCGaT ACCTAAAAAA ATCAAGAAAA	300
	TATTAAAATA TAAGACAAAA ATCTGTTTAT TCATATGCTC ACCTCTTTTT TCTCCATGTC	360
25	ATGCTTAAAG CTGTTATTCT TCTTTTCCAC GACAGATTGC AATTCATGCT AAATATTTCGT	420
	AAAAAGTTTC TATATTGTAT TACAACATTG CTACATTTGA CAATATTTTt TCTTTGTAAT	480
	TATCACTATn TTCCATTTAA TTGTATAATT AATGACATAT TnnAATA	527

## (2) INFORMATION FOR SEQ ID NO: 1190:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 889 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

40	AAAACGTGGC AGTAATTCAG TGTATGTTCA ATATGATGAT ATTATGTTTT TTGAATCATC	60
	AACAAAATCT CACAGACTCA TTGCCCATTT AGATAACCGT CAAATTGAAT TTTATGGTAA	120
45	TTTAAAAGAA CTGAGTCAAT TAGATGATCG TTTCTTTAGA TGTCATAATA GCTTTGTCGT	180
	CAATCGCCAT AATATTGAAT CTATAGATTG GAAAGAGCGA ATTGTCTATT TTAAAAATAA	240
	AGAACACTGC TATGCATCGG TGaGAAACGT TAAAAAATA TAATAAGATA ATAAAGTCAG	300
50	TTAACGGCGT ATTCAATTGT AAATCTTGTT GGATTTTAAC AAGATAACTA GCAAATGCAC	360
	TGTATAGCTG GCTTTTTAAT TTTATTAACA AAATTAAATA TGACGCGTGA ATTAAAAAAT	420

CTCTACAATC CTATGGCGCA ATTTTAAACA AAATATACTA AATtTGAAAT TGACAGTTTC 540  
 CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTTA AAAACAGTG 600  
 5 TAGCACAAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660  
 TTCAACCTCT TGTAATGTTG GCAAACCTATT AATAGCACCA TACTTCGTTG TCACTATTGC 720  
 AGCAACGCGA TTGCTAAACG CTAAATTTTC CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780  
 10 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840  
 CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

(2) INFORMATION FOR SEQ ID NO: 1191:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

25 AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60  
 TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAATTGC GTTCTCAATT AGGCGTGATA 120  
 TGGCTTTAAA GATTThAGTC TGTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180  
 30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTTAACAGAT TTGTAACATC TATGGTCTAA 240  
 nGATACGGGG TTAA 254

(2) INFORMATION FOR SEQ ID NO: 1192:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

45 GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60  
 TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120  
 GCTGTGTATh CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTTCA GCTGAATGAT 180  
 50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:



- (A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

10 TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAAACTG ACCAATGAAT GAAAAAATGG 60  
 GCAATGTTTT TGACAACAAT GGTCAATTAC CAAATAAAAA TATTGnCACc ATTAATACCT 120  
 GnCAAACGTG TTTGTTCTTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGGT 180  
 15 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

## (2) INFORMATION FOR SEQ ID NO: 1194:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTTGCh ACTGGTTTAC CAACGCATCT ATGTTCCGTC GCTATACCGC ATACAGATGT 60  
 30 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120  
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

## (2) INFORMATION FOR SEQ ID NO: 1195:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 180 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

45 ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GGnTTCTTGG 60  
 TCTAATAGTC CTCTTGCTCC TCGCTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120  
 CGGTTTCATCA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

50

## (2) INFORMATION FOR SEQ ID NO: 1196:

## (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60  
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTTAC TTAATCAATT TGGAAAAGCC 120  
 AAGATTTATT TAGTTAATAC ACGTGTTCCA AGAaTTTmTG AGGgCAAATG TAAATCGATT 180  
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240  
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

(2) INFORMATION FOR SEQ ID NO: 1197:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTTCCCAAT AATAATAACA ATACATAACT GATATTAGCT 60  
 GTCTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTATTTTTT TTGTGTCAAA 120  
 nAATTTTTTAT TTTATCTCTC CATCGCATTa ATTG 154

30 (2) INFORMATION FOR SEQ ID NO: 1198:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 249 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

40 AATCCTCACC CGTAATAAAC TCGTTTTGAA TCGGTTGTTC GAACTCACGG TATATTAAAG 60  
 CAATATCCTC TAACTTATTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120  
 45 CTAAATGTTc AGGCGTtACT GCATATTTTT TAAaATCTTG AATTtGTTCT GTTAATTTTT 180  
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTtGTTcTnT 240  
 GAACAATGn 249

50 (2) INFORMATION FOR SEQ ID NO: 1199:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGGTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTAAAAACCG 60  
AACTTGTGCA TTAATTGTAA AGTTCAAACCT CTCATCTTC ATAGATCGCG ATGCGTCTTT 120  
TAATTCTTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA 165

(2) INFORMATION FOR SEQ ID NO: 1200:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

TTATTAGCGA TTAAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT 60  
CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTGCA TGGAGTTCAA AACTATTTTA 120  
ATGCATTACA TGTGTGTAGT nAAGAGCAGG CGTACTTTTC TTTTCAAGGA TGTGACATAT 180  
CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG 236

(2) INFORMATION FOR SEQ ID NO: 1201:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 146 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA 60  
CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA 120  
AATGGTAAAG GCAAAGCTAT GGGCTT 146

(2) INFORMATION FOR SEQ ID NO: 1202:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 385 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA 60  
 5 GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG 120  
 TCATTTTCGTA CTTGATTAAA CTTTGTGTGA ATTGCTTTAG TACCTTCTAA ATACCTGGTT 180  
 GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA 240  
 10 TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC 300  
 TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC 360  
 GTCCATGCGC ATCnTnACCC ATTCA 385

## (2) INFORMATION FOR SEQ ID NO: 1203:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA 60  
 TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAAC GAAAAATTGG AAAAAGAAAA 120  
 30 TATAAACTA AAAAACAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA 180  
 AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA 240  
 TAAGCTTTAA CGGGTTTGAA TTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCAGTA 300  
 35 TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG 360  
 AACTATATAT TGCACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA 420  
 40 CAGATGAACA GGACAACTA ATTAACCTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA 480  
 ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAAGA CGACCGATTC AAAGTAACTG 540  
 ATCTAGACAG TGCTAACTGG GTTTTTTnAG AAACnGGAT 580

## (2) INFORMATION FOR SEQ ID NO: 1204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATCGTATGGT TGAGGCGAAT TTAAGTGAAG AATTAGACAA CGAATCTTGA TGAAAAGAGaA 60  
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120  
 5 GGTTCATCTA CATTGGAGC 139

## (2) INFORMATION FOR SEQ ID NO: 1205:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60  
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120  
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180  
 TGAACCGGTT GCAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

## (2) INFORMATION FOR SEQ ID NO: 1206:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

35 TCGACAAGTT TTTAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTTT TTAGCTACAA 60  
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTTAT 120  
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180  
 TAGGTATTTT AGAGGATGCA TTAGAACCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240  
 ATTAAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTAACTGc GATGaGCCCCA 300  
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360  
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTTT 399

## (2) INFORMATION FOR SEQ ID NO: 1207:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAAACAATA CGATTTGTAT GCTACTTGTC TGAAGACAAC ATAAACAAT ATGTTAACTG 60  
 5 ATATTGAGGA TATGGGCTTT CAAAATCCAn TTCAAAAAG GTTATGTTGA AATATGACGC 120  
 GGTGTTGAA AGAGACCC 138

## (2) INFORMATION FOR SEQ ID NO: 1208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 655 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

AGTCGCCTAA CTTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60  
 TTTTTGTATT CTTGGCGTAT TTTTTGTTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120  
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTA-TAT TTTTGTGCA 180  
 25 ATTGCCTTAT CAGCATTAAAT CGTATTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240  
 TTTTGATGAT CATTAGTGTA GAAAATAGCT GTTTnATATT GAGGACCACG GTCTTGATAT 300  
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360  
 30 GAGAATAATG CAACATCATA TTGAATTTCA ACAGTTTCTA AATGACCACT CGTACCTGAT 420  
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGTCGCCCCA TATATCCAGA AGTTACTTTT 480  
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540  
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTTCCATTA GACCTTAGTA CGATTTATTA 600  
 AGAAATCACT TGCTTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

## (2) INFORMATION FOR SEQ ID NO: 1209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

CCGnCCCCAA TGGAAATTAC CTTTGGTnCC CCATTTTAAT TGTTAAATTA TTGGAGTGTT 60

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAACA GCTTCTTCAG CTGGTTATT 180

AAACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213

(2) INFORMATION FOR SEQ ID NO: 1210:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:

TTGATTGCAA CTTGATAGT GAAAACATTT ACATGATGTT GTCAGTGGTG CACGGGCGTC 60

GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120

ACTACACGAA ACCCAATAGC nTCACCAGG 149

(2) INFORMATION FOR SEQ ID NO: 1211:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:

AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAATA GGATAATAAA TCCAGCGACA 60

TCCCAAATGG GATTCATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120

TTCTATTATA AAATTGGGCA AA 142

(2) INFORMATION FOR SEQ ID NO: 1212:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:

TTTAAATTTA GTCATTTCAC CTTTTAAAGC ATGTTTCATAA AATGTTTGCA TCATCAATGC 60

ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120

TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 765 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

10 GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG 60  
 CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTCATG 120  
 15 TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG 180  
 AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA 240  
 ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC 300  
 20 GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG 360  
 CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAATAGTA 420  
 CAATGGAGCC AATTTACCTA GACAATGTTG CTGTAATTGG GaAAGTAATT GGTTTGTACC 480  
 25 GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTTAT 540  
 AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA 600  
 TTCAGTTCAA ACAGAAATTG CGAATTGTTA GATAATCTCA TTCTTTAATA TAAATnTTGA 660  
 30 ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAAACTCG CCCCCGTAAT AATTTACAGG 720  
 AGCGAGCCAT TATTATTTTT TTCnTTCTTT TTTATTAAGT ATATC 765

## (2) INFORMATION FOR SEQ ID NO: 1214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

45 AGTTGCCATC AAAAATACAG AACCTAATnA TnACCTTTTA TGATTTTTTG TGAATTCAAA 60  
 GTCACCTTCT TTTTnAAGCT TTAAATTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG 120  
 AATATCAATG CCTTCTTTCA TTAAATTTT TCTAATTTTC GAAACAAATA ATAATGCATG 180  
 50 TTCTCCATCA CCATGCACAC AAATTGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT 240  
 TGAAATAACT TTATyyyCCt TCACCATCTT TAAACCTGC TTAAGTGCTT CGTCAGTATC 300



ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420  
 TGAATTTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480  
 5 AACGTTTGCh ATThC 495

## (2) INFORMATION FOR SEQ ID NO: 1215:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AntGTCCAGG TACCCGTGGT CCAAAATTCG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60  
 20 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120  
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180  
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTCATTGGA ATAGGTTTGC TGTGACTCGC 240  
 25 CGA . 243

## (2) INFORMATION FOR SEQ ID NO: 1216:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60  
 40 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120  
 TTTATTAATT CGATTAGTTC GAACTACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180  
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240  
 45 AATGCTCAAG CGCAnG 256

## (2) INFORMATION FOR SEQ ID NO: 1217:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

5 TTTATTTTTT CTTCTAAACG AAACATTGCT TCTTTTTGTG ATTGTTTTGT ATTCTTGTTT 60  
 AACACAACAC TTACGCGCTT CCATTTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT 120  
 CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTTTCAA TCCACATGTT TATACCTCCT 180  
 10 GAGAGAACGT ACGTTCTGTA AATTGTAAA AAATAATAAG GGTAGGTGGG CTACCCAAAA 240  
 TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA 300  
 ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTAC ATACCATATA AATATCTAAC 360  
 15 AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT 400

## (2) INFORMATION FOR SEQ ID NO: 1218:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

CCAAGTGTCA ATTTTAGATG ATTTTTTTGT TGACCTATCG CCTTAACTGA AGAACTGAT 60  
 30 AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTC CGAAGGCTT AAACGATTCA 120  
 TATCACGAAT ATTTTAAATC GTTATATCAT TTTCTGTAA TAATACATCT ACTTGCTTTA 180  
 CGGGATCTAA CGAAGTTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA 240  
 35 ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAATT 300  
 TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTTGA TCAATTGATC 360  
 TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT 400

## (2) INFORMATION FOR SEQ ID NO: 1219:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 458 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

50 AAGATATTAG ACATAAAATC TAAAnACAGC AGTAAGATGA TTTATGATTA GAACTATCT 60  
 TACTGCTGTT CACTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA 120  
 55

GCATTCATTT CTTGTcTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240  
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300  
 5 TTAActCATTT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360  
 TTTTCACTTC GCCAAGCCAT TTTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420  
 10 AAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

## (2) INFORMATION FOR SEQ ID NO: 1220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTTGTAAG GTACAATATA AGTTAAATGT TGTGTGTTAGG ATTGATTCTT 60  
 25 TCATCTGAGC ATTAAATTGT AAGTCGCTAT ATTAAATTTG TTCAGTATTT AmAAATAAAT 120  
 TGAAAAATTC AACTGATAAT AAAGGTGTTT TAATCATACA AATACTTGAC GGTTCGTAAA 180  
 TAGTGTTTCAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240  
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAAACTAC CAGTCTTAGC ACAACCAGGA 300  
 GTACATAAAC TATGACTTGT AATACGTTTCG TCACCTGCTG AATCATTTGA GTnATTGTTT 360  
 GCTTTAACTT GCACGTCTAA ATCAAGAACT TTTTCCATAG ATAAAACCTC CTATTATTAG 420  
 35 TTGAAGTTAA GGCCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480  
 TTATATAATT ATAT 494

## (2) INFORMATION FOR SEQ ID NO: 1221:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

ACTATTATTT TAATAGTGAC GACAGTTTAA ATTTTATTAA GTATTGCTTT AATTACCTTT 60  
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120  
 55 AGTTCACTGG TCGAACAATC ACATAATA 148

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

```

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT      60
TATAAAAATG AGGAATTTTT TGATTGTTTA ATTCAC TTGC TAATTGATTA GCTTTTTGTT      120
GGTCTTTAAT TGTAACGTCG TGTGGTGCAG TATATTTTAT TTCAC TTGAT AAGGACGCTC      180
TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG      240
TAAGTGAAAA AGCATTTTTT TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT      300
TACACTTAT AACACCTTtT CTAAACtTCT TCACCATTTT AAAA ACTAGA GArACAGAGC      360
TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAaAA A                          401

```

(2) INFORMATION FOR SEQ ID NO: 1223:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

```

CTTGACCAAA TCCATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA      60
AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGaTATTACT GATTTCCCAT CATTGTnTAG      120
CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG      176

```

(2) INFORMATION FOR SEQ ID NO: 1224:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

```

AATACTTTTA CGATAATTAT AAAGGTTTCAT TCAAATCTTA GGGCAAAATG TATAATATTT      60
TTATGCAAAT TTAaACaNT AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT      120

```

AATGCCAATC AAACCTCGCTC GAAATAGGGG GAAACGAGGC nATCATT TTTT GACAATGAGT 240  
 5 GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

(2) INFORMATION FOR SEQ ID NO: 1225:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 217 base pairs  
 10 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAAGAGGT 60  
 TAAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGCACAAC CATTAGTAAA 120  
 20 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCACG TGAATnACGT CAGGATGTCn 180  
 GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

25 (2) INFORMATION FOR SEQ ID NO: 1226:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

35 TGGGTACTAT TTATTACGTA AAAC TTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60  
 TTACAAAAGC GGACTAGGTT TGCAC TTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120  
 40 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTTGTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60  
 55 GGTGGAAGTT TAATCAAAAG TAAAAATTTA AGCACGTTAT TAAAACCACT ACATCAAACC 120

GCGGCCGTTT TAATTTTGTG TTCAAGTTAA TCATACTTAC ATATAAAAAT GAAAAGTTGA 240  
 ATTTTATAGTA CAATTTCCAC TGTATTTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300  
 5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360  
 TCCTTGTAAG AGTGTGTTTG TAGTATCATA AATATGTAAA 400

10 (2) INFORMATION FOR SEQ ID NO: 1228:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

20 ATCTAGCATG CTTTTGGAAA ACGATAAGAA TTTGGTGTTT GAATTTTCATA ACCAACACCA 60  
 GCAGTTTCAA CAACTACGTG TGTAGGATAT AAATGTGTGA CTTGACCTTT GACATACGCG 120  
 25 TACATTATAG GCACATCCTT ACATACTCAN 150

(2) INFORMATION FOR SEQ ID NO: 1229:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

TCGGTACAGT GCATTTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60  
 TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120  
 40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

55 TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180  
CA 182

(2) INFORMATION FOR SEQ ID NO: 1231:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 233 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTTAAA TTGTACACAA TTCTGGATAA CTATCCCCAT TTCTGTGGAT AAACACCTTG 60  
ATGTCTTATT ACTTATCCTC GTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120  
TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180  
ATTTTAGCTA GCnTTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

(2) INFORMATION FOR SEQ ID NO: 1232:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 385 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

GTTTTTGGTA AAAGTACTAA TATTAaCCAA GTATTGAGTC ATATGTTAAA ACAAGATGCG 60  
AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120  
TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180  
ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCTTTCTCT 240  
AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300  
GATAATGAAA CGTTACGAGA CAATAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360  
ATTGnTAGCC CAATGGnCCC TTAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 180 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60  
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTTTGTG AAAATGAACG 120  
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAAACG GTAAAAATCC TGAAGTGAAG 180

## (2) INFORMATION FOR SEQ ID NO: 1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

ACCATTTTAA TTTnChTTAT GACCTTGTAT GCCATTATCA aCAGTTATGA TTAATGTTAT 60  
 GCyTTCATCA TGAGCATTTT TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAGCGG 120  
 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAAATTGTA 180  
 25 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTGCT 240  
 ATCGCTCTTT TAATTCTTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300  
 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGTh CATCAATAAT CGATTACTT 360  
 30 nCTAATATTT TTTTACGAT TGGCGTTAAC TTTAATTTTG ATGTTAATTC ATCACTTATG 420  
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

## (2) INFORMATION FOR SEQ ID NO: 1235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

CGTGATTAAG TTGGATACTA AAATTTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60  
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120  
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

## (2) INFORMATION FOR SEQ ID NO: 1236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

GTAAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC 60  
10 ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAACAA TAACTGGAAT ACTTnGATTT 120  
AATCCCGCTA TAACATTTCC TAAT 144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 204 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

25 ATAGTTTAAG GTGATATTCA AACAAATATTA GGTTTGATTT AACTATCAAG CATCTACTTT 60  
GTCATGTTTA ATACCAGCAA ATAATAAAAT CCATGTCACG ATAATAAATG GCATGTTAAT 120  
GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC 180  
30 GGTTAATTAA CCACCCCCAA AAAA 204

(2) INFORMATION FOR SEQ ID NO: 1238:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 157 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

CGGTCATTTT GGTATTTnAA CAACTATACC TGAGGGGTGG TGGGTAATTC GTATTGCCGA 60  
45 TTCAGTTTTG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA 120  
TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT 157

(2) INFORMATION FOR SEQ ID NO: 1239:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60  
 5 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120  
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTC ATTT 164

## (2) INFORMATION FOR SEQ ID NO: 1240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

TTGAAAACT GAAAACGGTG AAGTTTTACA AACAACTAAA ACAGATAAAG ATGGTAAATA 60  
 TCAATTTACT GGATTAGAAA ATGGAACTTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120  
 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180  
 25 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

## (2) INFORMATION FOR SEQ ID NO: 1241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGGTAAT CATAATTTCT ACCATGAGTC 60  
 40 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TGnCAAGTTT 120  
 AAAATAATTT GCGGTGTTGG CATTTGAGTA TC 152

## (2) INFORMATION FOR SEQ ID NO: 1242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120  
 5 GCAACTCTAA CTCATTTATA TTAACTA 148

(2) INFORMATION FOR SEQ ID NO: 1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60  
 TGAATATCGT GAATTAGTAT TAAAAGCAAT TCACATGATT ATGCTTGGTT TCTTGATAA 120  
 20 ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180  
 TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATAACAGC TTATATTTAT TCTTTGACTT 240  
 TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300  
 25 AAACCTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAAGAT TTCTGGAATA GATGGCATAT 360  
 GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420  
 30 TAAAAAATTA TTGAAGAGTC AATTTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480  
 CATAATGGGG ATTTGGGCGAT GGAACGAAG TGTAATACCA TTGGTTTAAG GGGTTAAACC 540  
 ATGGCCAGCC TTGGTTAAAG GGTAnGGnCC AATAAGGACG GTGGGCGG 588

(2) INFORMATION FOR SEQ ID NO: 1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60  
 AATTTTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120  
 50 TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTATTG TTTTAATTGA AAAGCAACAT 180  
 AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240  
 55 GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTTCTT ATGAATTTTA TTAAGAAAAT 300

GTTATATGTh ACAAAA

## (2) INFORMATION FOR SEQ ID NO: 1245:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 288 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

15	CAATTTGTTT TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT	60
	TTCGGTCAAC ACCTTTTTTTC GTTAATGGCT TGTTCAATTG GGTAACCAT GTGGTTATCC	120
	CCCAACCTGG GTACCGTATG GGGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTAA	180
20	TAAACCGGTA nCAAATTAAA AGGTCCTTTT TTAAAAAATT TTTGGTTTCC AAAGGGGCCA	240
	ATGGnTCCCC CAATTAATGG TTAAAGGTTT TAACCCCAAT TTTCCGGC	288

## (2) INFORMATION FOR SEQ ID NO: 1246:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 161 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

35	CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTAAACGAC GAGAACAAAG	60
	CAAGTCGACA TCAGTAAAC ATTAAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT	120
	TTTATAAATC TATACnTCC AAAATGTAAA ACTACCAAAA T	161

## (2) INFORMATION FOR SEQ ID NO: 1247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 421 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

50	TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA	60
	AACTTAATTC AAGTGTTTTA GTCATGAATA TGTCTCCTG ATTAAATTGA TAAAGATTTG	120

TTAATTTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240  
 TGTTCGCCGT TAGCGTCTAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300  
 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGGCTAAT 360  
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAn 420  
 G 421

(2) INFORMATION FOR SEQ ID NO: 1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAAATTTT 60  
 ATTCTTCTAT AAAAACACCT CTTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120  
 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180  
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGATA AATAGACGAT 240  
 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300  
 TTAACCATCA TTCGTTGTCA AAGTTTGGAAT ATgATGGTTG TTTTTTATTG TTTAAATTAA 360  
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAACCTCA 409

(2) INFORMATION FOR SEQ ID NO: 1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTAGCAA 60  
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAGACTG TTTATCCAAC ATTTCCAGAC 120  
 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180  
 TCATTGCAGG TATATTGATG AATTCACAAG TTGGTAT 217

(2) INFORMATION FOR SEQ ID NO: 1250:

- (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60  
 GGCA GTGCAC TAAGTATATT CATTGATCCT GCATTTACAC GATGAAAGCA TTTATTGCAT 120  
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15 (2) INFORMATION FOR SEQ ID NO: 1251:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25 TTTCAACTTT CTAAATTATA ATATATCTTT TTAAAATAAG CTAGAATTTT TATATAATAA 60  
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTGTA 120  
 30 TATTGCGAGT TAGTTTATAT GGTTTGGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180  
 AAGCATGGTA TAGTGCAATT nAAAAanCTGT GT 212

(2) INFORMATION FOR SEQ ID NO: 1252:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60  
 AGTTCATAAT CAAAGATTTA TAAATGThTC AGACTGCCAA TATAACATTT AGGACCTAGA 120  
 ACATTGATTA T 131

50 (2) INFORMATION FOR SEQ ID NO: 1253:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60  
 ACGTCATCAT TTAGAAACAG cAATGAATAC CCTGAmATTG TATTTGTTGG TAATCACTTA 120  
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTTAGCAG ACAAAGATTT CTCTGTAAAC 180  
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTTAGATT GTTCAAACAA 240  
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAAC GTATATTGTC AACACGGAT 300  
 AAAGAAAAAG GnGCTTTTAA ACAGTTGGCT ACAAACGAAG GTTATGAAAC GTTTATCGTA 360  
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420  
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

## (2) INFORMATION FOR SEQ ID NO: 1254:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAACTTC ATATACTATA GTTCTTTTTT 60  
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120  
 TCTTTTTC AAATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180  
 35 AGGTAGTAGG TAATAAATAT AAGACTTAA GTTAAGATTG CTTTTTTCAT GTTTCATAAT 240  
 TAAAACCTCT GTAAATTTAA GGTTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300  
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360  
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

## (2) INFORMATION FOR SEQ ID NO: 1255:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

NAATCTATGT ATGGGGGCAT CCAAAGATTT CATAGACTAC TTATTTGTTG ATGAAGCCGG 120  
 ACAAGCAATC CTCAAGC 137

(2) INFORMATION FOR SEQ ID NO: 1256:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:

TGAAATGTAG AAATTGAATT AGAAATGAAG ATTAAAAATC nACACGTATC GTTCAAGTGG 60  
 TGCAGGTGGT CAGCCGTAAA CACAACTGAC TCTGCGTACG TATTACCATT TCCACTGGTG 120  
 TCATTGCAAC ATCTTCTGA 139

(2) INFORMATION FOR SEQ ID NO: 1257:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 177 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:

TTACCAATT TTTTAACACC ATGTTTAGAC CAATTTGATC TGACTAAATT AATCGCTGTT 60  
 TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC 120  
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTCGAA ATTGTGAAGT CGTTGTA 177

(2) INFORMATION FOR SEQ ID NO: 1258:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:

AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT 60  
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG 120  
 TATCACTTAG GTGTATCAAA CTGACCACAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC 180



TTAATTTTTC

250

## (2) INFORMATION FOR SEQ ID NO: 1259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

ACATTTACGG GACATTTTCAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60  
 ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTTAACC AAA 120  
 TAATGAAACA ATAAAAACA TTATATCGTT ACTTATTAAG TAATTTGGCA 170

## (2) INFORMATION FOR SEQ ID NO: 1260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTACTCC GATACGTTGT ATTCAAGTTG ATGACACTAG GAATTTGTAA TGATCAATTT 60  
 CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTTGTGG ATAGACATTC ATATCATTGT 120  
 CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180  
 TGAGACACAT GTTGCCTGAC TGnGGATTTA TCAnATAATC TCAATCACGT GATCCnATCA 240  
 CATTCAATCAG CTCATAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GGCGTACCGC 300  
 CAGTGTCCGC ACG 313

## (2) INFORMATION FOR SEQ ID NO: 1261:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180

GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 144 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60

TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120

CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 132 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60

AACCGAACTA ATAATCACAG CAAAAATAAA ATTAAAAATG CTCTAATAGT GCCTACATnC 120

TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 159 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATT GGTTTTAnGC GCTATTTAGA ATAGCCATCA GATAAAATCA 60

TTATTTAAAC GTATAATAGG TCAAATATA GAGAGTTACT ATACAAATTT CTAACTTTCA 120

CTTAAATATA AATATATATA ATTAAAGTGG AGGAGAAGG 159

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG 60  
 ATTAATTAAT AAAAAGCTTA TTGCAAATA TGTTTTTCGG TAACTGTAAT TTAGTGATT 120  
 TATCATTAAC AG 132

(2) INFORMATION FOR SEQ ID NO: 1266:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

CATGGATTTA TCTTAGCGAT TGGTCTAATT TTACCTTTAG GTGCACAAAA TGTATTTATT 60  
 TTAAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC 120  
 GGGTTGTCAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG 180  
 TCTTTACCTG TACTTCAWGC AWTATTATAT ATAGTTGGTT TAATTTTCTT GATGTATATG 240  
 GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAACCTCAAAT TATGTCTCCA 300  
 ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT 360  
 ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GCnGC 405

(2) INFORMATION FOR SEQ ID NO: 1267:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

TCTTTATATT GCAGTACAAA ATTCGCGTGG AGGTTTAACA CAAGTAGACC GCACAAGATT 60  
 TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GnTATCGTTC AAACACCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTGTAC TTGTATCGCC ATCAACAGTA 60  
ATCATATTAA ATGTATGGTC AGTCGAAGAT TTAAATAATT GATGAAGTGT ATTCGATTCA 120  
ATCGATGCAT CGTGTATATA AAGCAAGCAT GTAGCCAATT GGAATCAAC CCGAnCTTGG 180  
CACACATGTA CGTTACACAT TAGAACnCAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240  
CAAGCGC 247

## (2) INFORMATION FOR SEQ ID NO: 1269:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60  
GGGGTTGGGA AAAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120  
TTTAAAGTGA GCAGCGCAG GTCAGTCATC TCTCACAGnA CCTAAAAAGA ACAGTAAGCn 180  
CAACCTAAAG CAGTGGAAGT TAAATCATC AAGGT 215

## (2) INFORMATION FOR SEQ ID NO: 1270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60  
TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT nGAGTGAAAG GCCCAGCAG 119

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GGCGATTTCG 60  
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120  
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180  
 TCATCTTGAA CGTACGAGCC TAATCGCCCh GCGCGATCCT GCC 223

(2) INFORMATION FOR SEQ ID NO: 1272:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60  
 TCTTCAGCAT GCTCCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

(2) INFORMATION FOR SEQ ID NO: 1273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60  
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120  
 TTAACA 126

(2) INFORMATION FOR SEQ ID NO: 1274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGCCGTA GGTGCAAAGG CATCAGGTTT 60  
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAATGA GAAATCACAC TCAGTTAATG 120  
 CATGTACTAG C 131

## (2) INFORMATION FOR SEQ ID NO: 1275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

20 TGGAGTATTA CCTCAAGTGA ATACAACATA CCTGTTGGAA GATTTTTC AAATTTAATT 60  
 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120  
 GATACTAATT TGGCCTGGCG CACGCTTTAG TANTAGTGG 159

## (2) INFORMATION FOR SEQ ID NO: 1276:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 577 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

35 GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTGTTTTTT 60  
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120  
 40 TTGCTTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGTATTT CAATATCATC 180  
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTG AAGTAATAAT 240  
 TTTsATAGTG CCATTATGAT TTTyyctGAA TAACTAAATC ATCTTTATCT AGTTTTAACT 300  
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360  
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420  
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTCTG ATTATCTTCT TTAAATTTT 480  
 50 CAATAATTGA CAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTCATCTA 540

## (2) INFORMATION FOR SEQ ID NO: 1277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAAnTAAG GTAATAGTTA CCAAGTACCA TATCTTGTGG ATGGTGTACT ACAGGTTTAC 60  
 CATCTTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120  
 GCCTCTTTTG A 131

## (2) INFORMATION FOR SEQ ID NO: 1278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCGATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60  
 TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120  
 TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATna 166

## (2) INFORMATION FOR SEQ ID NO: 1279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60  
 AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120  
 ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180  
 ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240  
 TGTTTATTAA CAGAGGCACG AATTTTTTAAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300

ATTCATTTAT AAAAATAGAG GAGTATTTAT TCTTGTGAT CCATATnTAA TAGAGAAT

418

(2) INFORMATION FOR SEQ ID NO: 1280:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

15	GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT	60
	TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA	120
	ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA	180
20	CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT	240
	TCATATTTTG AAACATCAAA GCCGTCTTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA	300
	TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC	360
25	TTATCTAATA ACACATCAAT ATAACCTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT	420
	AGTACGAGTC CATTTTGAGA ATAACTTT	449

(2) INFORMATION FOR SEQ ID NO: 1281:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 289 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

40	TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA	60
	ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA	120
	ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT	180
45	TTGGTGTTCA ACAATTTAAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT	240
	TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT	289

(2) INFORMATION FOR SEQ ID NO: 1282:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTCAGGTCG AGGTGGCCCG GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60  
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120  
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC 180  
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240  
 GCATCCCGAT GCCGCCGAA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300  
 CTTCTTTACC TTCTACATAG CGCGTGAGCA GAACCATCTT GATGgCACAG CTAAATAATG 360  
 15 CaATgGGAAT GATGTATGAC ATTCGGGGTG CATAATTTCT CT 402

## (2) INFORMATION FOR SEQ ID NO: 1283:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

25 TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60  
 GCGGTGGACT ATTGTTGCGA CTGGACACCC GAGATATTGC TCAGCAnAGC ATCATATACA 120  
 30 GGAAGTATTA AAAGAGACTT GncGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180  
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

## (2) INFORMATION FOR SEQ ID NO: 1284:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 146 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

45 CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60  
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGTGA 120  
 50 ATCAATTAAG TCTGCCAAAG AAAAGA 146

## (2) INFORMATION FOR SEQ ID NO: 1285:

- (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

10 ATTCGCGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60  
 AGCCCTCCAT TTCATGATTT GATTTGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120  
 GGGGAnATAC GAACCTC 137

15 (2) INFORMATION FOR SEQ ID NO: 1286:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 594 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

25 GCTATTGATT ATGGTTAGCm TGTTGTTTCwC TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60  
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATTT 120  
 TTATGATTAT AAAGCTGGTA TGGATGAACT ACGTCGATTT AATCAAATTA ATCATTATCG 180  
 30 AGATAATTTG ATGGCTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240  
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300  
 AGTTC TAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360  
 AGTTTTAATG GTCTTAACTT TATTTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420  
 TAAAGCGGAT ACTGACCAAG CATTGCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480  
 40 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540  
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGTnTTG TCGGATATTn ATTT 594

(2) INFORMATION FOR SEQ ID NO: 1287:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

55

TGAAGTAGTA ATAAACCCGG AACCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120  
 5 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCCAATGGAG GTCCAACCAA TCCAAACCCC 180  
 ATTCCGCTAA TGNCTATGGG TCCCAATTAG GAATCCAATG GATGGATGGA TTh 233

(2) INFORMATION FOR SEQ ID NO: 1288:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60  
 20 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGTAAGA AACGCAAACA 120  
 TGGTGCGTCA CG 132

(2) INFORMATION FOR SEQ ID NO: 1289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTCAT GATACATAAA 60  
 35 CATGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTTGCCGTTA CAACACCATT 120  
 ACGGTTATAC ACTTnTAGCC AATCATTATC TGGG 154

(2) INFORMATION FOR SEQ ID NO: 1290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTTCTGAT AAATCATAAC CTATATACAT 60  
 55 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1291:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTGGATA CCATTTTCATC GTCTTCTCTT GATTTCTAAA 60  
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120  
 ATATTGTATT AACAATTGAG TAAAGCTGTG TATTAAGTCA TCTTTCTTCG ATGCAATGGT 180  
 AGTTAATGAT TTTACACGAT AAGCATATTT ATCTGTAAAT AACTTAGCAA CTACCCACCC 240  
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTTTAA 300  
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTTA GAAGACTTGC CATGA<sub>c</sub>CTCT 360

## (2) INFORMATION FOR SEQ ID NO: 1292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60  
 AACGnTGAGT ACACAAAATA CAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120  
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

## (2) INFORMATION FOR SEQ ID NO: 1293:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60  
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

## (2) INFORMATION FOR SEQ ID NO: 1294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTTATAT ACCCTCTTAT 60  
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTtagTG CAGCCTACAC 120  
 TTCGTGATTG GGCAnTAGTT CTtAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGgTTAA 180  
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

## (2) INFORMATION FOR SEQ ID NO: 1295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATTGCCAG TGAGACTTGT ATCATATAGT 60  
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCcAGTTT CAGATGGCAC ACAGATGAAA 120  
 TGTTTCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

## (2) INFORMATION FOR SEQ ID NO: 1296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTTAAACGC TTCGAAATGT TTTCAGTAAC TAATTTTGCC 60  
 ATAATCCCAA AAACtCCTTG ATTATTAACT GChTTTTGAT TGGCTACATT AAGGCTTTAT 120  
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180  
 TAACATCAAC GCTTACnGGA GTTTCAG 207

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 145 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

ATGGCATCGG TTGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA 60  
TACCTGGAAC CTTTGGTGCC TACCACCAAT TGGTAACGGT TTTACCATCG GATTTTTAGT 120  
GATACAGCGA TATGTTTTGT ACAGG 145

(2) INFORMATION FOR SEQ ID NO: 1298:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 139 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

TCCAAAAGTT AAAGGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA 60  
AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT 120  
TCAAGCGTTG AATTGTGGT 139

(2) INFORMATION FOR SEQ ID NO: 1299:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA 60  
CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTAAATT 120  
GTTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT 180  
AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA 240  
TTTTACATCT TCGAAATGTA GTTTTTGAAA ATACTTTGTA TGTATATCTT TAGCACTTCC 300  
AAAATTTATT GGCAGGTTAA TTAAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG 360

## (2) INFORMATION FOR SEQ ID NO: 1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

CTACAGTGCA ATTTAACCAT GAAGTTGTTG ATTTTGAACA ATTATCAAAT GGTCAATGGG	60
AAGTTACTGT TAAAAATCGC CTAAGTGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT	120
TCATCGGTGC TGGCGGTGGA GCAATTCCAT TATTACAAAA AACAGGTATC CCTGAAAGTA	180
AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCaCAAGTTA	240
TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG	300
TACCTCATTT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATTT GGACCATTGT	360
CTAATGTTGG ACCTAAATTC TTGAAAAATG GTTCTAACTT AGATTTATTC AAGTCTGTTA	420
AAACATACAA CATTACAACT TTATTAGCAG CAGCAGTnAA AAACCTTACCT TTAATTAAAT	480
ACTCATTTGA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT	540
ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA	600
TCAAAGATAC ACCTGAACAC GGTAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT	660
CACAAGACCA CACTGnAATT GCATTATTAG GTG	693

## (2) INFORMATION FOR SEQ ID NO: 1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

CATACTGGG TAATGCTGCC CATGGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT	60
GTGnATGTAT ATAAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAAACTTAAA	120
ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTTAACCTAG GACCTGAACC	180
AGAATTCTTC TTGTTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA	240
TGGTGGATAT TTCGATTTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT	300

TCAACATGAA AtTGACTTaA ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420  
 TTTAAATTGG TTGTTAAAAC AATCGCACGT AACATAATT TACACGCAAC A 471

(2) INFORMATION FOR SEQ ID NO: 1302:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTTTGGATT 60  
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTAACTAA 120  
 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTG 180  
 TACTCACAAA CTAGTTTAA ATTCTAACTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240  
 ATAAACCAAT GAAGCAATCA GAAAACACTC TAATTTTCTa TTAGAAATTT GntTTAATAT 300  
 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACC CGTCAATTTT TGTTTAATAT 360  
 GCTTGGTGAT CTnTTATTCT GCGTAATAAT GCTAAACCTG 400

(2) INFORMATION FOR SEQ ID NO: 1303:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

AAAAGCTTAG TTGAACTTTC AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60  
 AAAAGACTGG GGTAAACTnC GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120  
 ACAACATC 128

(2) INFORMATION FOR SEQ ID NO: 1304:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTCTT CCACCTTTTTG 60  
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTCTT 120  
 GCACCATACA TTAAGTACTT G 141

## (2) INFORMATION FOR SEQ ID NO: 1305:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GA CTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAAATTAA 60  
 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAAnT 120  
 AGAGTAGAAT GATGGTGAGG TCGATTTTAG TAGACTCTGG AC 162

## (2) INFORMATION FOR SEQ ID NO: 1306:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 282 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACTAA TAATTTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60  
 TCTAAAGGTG CCATAAATTT AAAAActATA GTAGTTGTTT TAAATTTAGT TGTTGGTGAA 120  
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTA CTCAAAT ATATAGCCTC CTCTATATCT 180  
 TCTTACATCT ATATTTTCT AGTGATTTTA AATTGAACTA AGCTATTTT CATATAATTT 240  
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

## (2) INFORMATION FOR SEQ ID NO: 1307:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

AAGGAAAAAA CCCTTGGCCT TTGGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAAAAAA 120  
 AAGTTTAACC CGGTTGGCCC CAATTCCTGC CCGGGGAACC CAAAAGGAnT TTTAAAAAAG 180  
 5 GAAACCCAAT TCCCGGCCCG AAAAGGGTTT TTAAGCCCAA CCGGATTTTA AGGAAAACCA 240  
 TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

(2) INFORMATION FOR SEQ ID NO: 1308:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 692 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

20 TGTATTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60  
 TCATATTCCA GAAATGTAT ATGACAATCT AGTAAAACT GTACATAAAT ATTTACCATT 120  
 GCTACATAGA TATACTGAAT TGCGCAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180  
 25 TGATTTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240  
 AGAGTGGATG TTAAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300  
 AGGCTTAAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAAACGTT CAGGTGGCTA 360  
 30 TTCATCAGGT GCACATTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTT 420  
 AGACTTATAC ACATTAGTTC ATGAATTTGG GcATTCaGCA CATAGTTAct TCaGTAGAAa 480  
 ATTCCaACCG TCaAATTCTa GTGACTACaC TATTTTGTG GcTGAAGTTG CaTCAACTTG 540  
 35 TAACGAAGCA CTTTTAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600  
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTCGC 660  
 40 AGAATTTGAG CATAAnATTc ATGCAATTGA AG 692

(2) INFORMATION FOR SEQ ID NO: 1309:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTCG ATGATAGCTT TTTGACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

TGTGCATTG ATAATATTCA CTATGATTCG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60  
 CTAAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

CACCCAACTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60  
 CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCn TGTTCAATTTT TAAGAAAATC 120  
 AATAGAAGTG TATCGATTAA AACTACATTT GAACCATTAC TTTG 164

(2) INFORMATION FOR SEQ ID NO: 1312:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60  
 TTTAATAGGC GGCTTTATTC GGGTGTATT GTATGTAAAG TGAAAAATTT AAnCCCATTT 120  
 CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA nTCCAGAGGA TTACAATTAT 60  
TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT 120  
TATATGTATC GGT 133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 629 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC 60  
CATTTACACC AGGTTTAAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG 120  
TGATTGAAGA GCATTTGCTT ACAGAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT 180  
CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT 240  
TGTCAATAAA ACAAATTACT TCTCAAATCG tATTGATTTA GAACAAGTAT TACAaACTAA 300  
TGGAAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC 360  
AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTAA AATCAGCATG TAGATAACGC 420  
AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTTATCA TCTGCAAAAG GCACACAAGA 480  
TATTAATGAT ATGTTGGATA CTTTTTTCAA TGAGAAAGGT AAGTTAATTG GTATGTTGCA 540  
AATGTTTATG ACAAAGAGA GTATTGCAGA TCGCATTCAA CAAGAACTTA TACGTTTAAAC 600  
ATCTCATCCT AAAGCAAGAA CAATTGTGA 629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

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ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT 120  
 CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAAATGG TCGTGAAAAC TATGATGCAA 180  
 5 CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT 240  
 ACGTACGTAT TGATAGAACA CGTAAACTAC CATTAAACAGT ATTGTTACGT GCATTAGGGT 300  
 10 TCTCAAGCGA CCCAAGAAAT TGNtGACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT 360  
 ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA 399

## (2) INFORMATION FOR SEQ ID NO: 1316:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 778 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

ATAAACATTT TAAnATGTAA TtnAGAAATT TTTTtagTAC AAAATCTTTC TTAATAATGA 60  
 25 TTAAGGAGGT CAGTAATGAT TGAAATTAAA ACATTAAACGA ATAATGATTT TAATGAGTAT 120  
 AAGAGACTTG TTTCGACAGT CAATGAAGAA TTCACTCAAG ATTCACATTA TAGTCAAACA 180  
 30 ATGACTGACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT 240  
 GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT 300  
 GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT 360  
 35 AATAGCGAGC TCATTAATTT CATTATTAAT TATGCACGGC AGAACAATTA CGAATCTTTA 420  
 CTTACATCAA TTGTGTCAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC 480  
 GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT 540  
 40 TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTTA TATATTCTAC rTTTCTCATA 600  
 AATTCAAATC ATATAGGTTT TATTTTTCAT ACAACTACTC TACTATTGAG TAGTTGTTTT 660  
 TTATTTGATA TGATAACAAT AAGTTTTTTT CAGAATATTC TATGTTTTAG GGGTGTCAAA 720  
 45 ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATCnTAA GCGATTGGGT CCTAAnTT 778

## (2) INFORMATION FOR SEQ ID NO: 1317:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AAACAAAATA AGAAGTTAAA 60  
 5 AGGTGTGGCA TCTGCCGAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120  
 TGGTGTACT TAAACTAAG ATATCCATTT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180  
 10 TCAGCATATA TTGCTTCTT CAAGGTTAAA GCAATCGCAT TAGGAACTGC TGGATTGCCA 240  
 GgATTtATTT CAATCAATCC AGTACATGCA GGaTGGTTAC ACTaCTTTGT TGGTATGACA 300  
 ATATCATTcA TCATTGcTAT AACAGTTACT TTAAtTTTAT CtAAaAGAAa AGCAAATAAA 360  
 15 GAAGTTGTAG AATAAAAAA GAGGTATGAC AGTAATCAAA GTATCAGTCA TTGCAAATGC 420  
 AATAGGATGA AACTTTAAGC TGTACATACCT TtnAATTTAG TTATA 465

## (2) INFORMATION FOR SEQ ID NO: 1318:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAAGAA AATAGCATTG 60  
 30 CATAATACCC AAGCAATAAA TACTATAATA TTTTGAAGT AACTAATCAA ACATCTAAGA 120  
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

## (2) INFORMATION FOR SEQ ID NO: 1319:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAAT TTAATATCAT TATTACTTAT 60  
 45 TTCTTATCTT TATtnTCTTT TTTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120  
 AATCCCCAAA T 131

## (2) INFORMATION FOR SEQ ID NO: 1320:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60  
GTTTGTACAA TATTTAAATA TCAAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120  
ACCATTAATA AACGGAAAGA 140

(2) INFORMATION FOR SEQ ID NO: 1321:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60  
CTTTGAAAGT GAATGATnCT TTAAATAA AGAAGATAAT ATAAAGTGCT TGATAATGGA 120  
TTTGTAGTTG ATGATTTAAA 140

(2) INFORMATION FOR SEQ ID NO: 1322:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 185 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60  
TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120  
ATACTAAAGT GTTCTGCACC TTGCCTGTCT CCTTCAAnTT TCGATTACTG TAGAGCACAA 180  
GTACG 185

(2) INFORMATION FOR SEQ ID NO: 1323:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60  
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120  
 GTTGGTGGTA TGGTGCGGTA nTTGGTTT 148

(2) INFORMATION FOR SEQ ID NO: 1324:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60  
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120  
 TTAnGCTCCC TAGTGGATGA A 141

(2) INFORMATION FOR SEQ ID NO: 1325:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60  
 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120  
 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAAGACG GTAATATGAT TAAATGGTCA 180  
 CGACAAAAAG ATTCTTTCTA TTAT 204

(2) INFORMATION FOR SEQ ID NO: 1326:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:



TTTGTTAAAA GTCTTCATTT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120  
 AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATTnAATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60  
 AGTAAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120  
 TGACGCTCAA ATAGTTTAAC TTGATCGGA GCTTTTTTTAT AATGTATACC GAAAGGTTCA 180  
 AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240  
 TTAATCCTAA TAATATAGAA TTAATCATTG GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300  
 CAGAATTGTC TGAAGTGCAC TGAGCGGTCTG ATCTAATGTA GGTAAGTCTA CATTTATCCA 360  
 ATAGTATGAT TGGCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420  
 CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTTGT GGATGTTCCA GGGTATGGAT 480  
 ATGCTAAAGT AAGTAAACA CAACGTGAAA AATTTGGGAA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60  
 TATCTTGACT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATnA 120  
 ATAGATGCCG ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

5 TG TAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60  
 CTGCAATGAT ACCTGAAGCA TGAAGTTCTT CTGnTAAAAA GTATACGACA AAAGG 115

(2) INFORMATION FOR SEQ ID NO: 1330:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

20 AACAAAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTTG 60  
 CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

(2) INFORMATION FOR SEQ ID NO: 1331:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

35 TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60  
 TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGAA AAATTAACTT AAGTTAGAAT 120  
 CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAAGAAC GTCACGACTT TATGATGATG 180  
 ACTGAACCCA GTTTTTACGG AAG 203

40 (2) INFORMATION FOR SEQ ID NO: 1332:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

ATGATGTACT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CCTCATTTTA ATCACCTTTT 60

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180  
 TTTAWTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAACCTGT AACGTAAGAG 240  
 5 AATGAAAAAT AAGCTGnATA TGTTGTTTG 269

(2) INFORMATION FOR SEQ ID NO: 1333:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTTGGCATTTC 60  
 20 TTGGAATTTG AACACATCC TGTTCATTTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120  
 ATCAAAGTAA TGTCCTTTTC TG 142

(2) INFORMATION FOR SEQ ID NO: 1334:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGAATAACA CATGACAAAT 60  
 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTTCATC TTGATCTTGC 120  
 ATCCTTGCTC TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180  
 40 TTTACAACGC TGTTCAATAC CTGGGAATAA G 211

(2) INFORMATION FOR SEQ ID NO: 1335:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60

TCCGCTCGC

129

## (2) INFORMATION FOR SEQ ID NO: 1336:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 633 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15 CATGATGGCn TCTTACCAAA GGCGATTTTA AGAGCAATGA TACCAAGATA TTTTAAATAC 60  
TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACCTT GTTAAAAATC AAGTTCCTTAC 120  
CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC 180  
20 CTACTCTCAA AAGATGAAAT TATATATACA TATTTAAATA TAGTTCCTTC GGTAGAGATT 240  
ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC 300  
CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG 360  
25 GCTATACACC CTACGAAAAA GATGGAACGT TAAAATCGGA TAAAGATTG AAATATAGTA 420  
TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAG 480  
AATACAACGA CGCATTAAAA TATGATATTA AATCACATTT GTTAAATCGA AAAAAGCGTT 540  
30 AATTGATGCT CACTTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AAACAGCAGT 600  
AAGATTATTT TCAATTAGAA AATTTCTCAC TGC 633

## (2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 317 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45 ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA 60  
CTTTTTCCTA TACTACAAGG ACCTTTACTT TAAAACAACG AATTTACAAA ATAAAAGGCA 120  
TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTAAAAT CGTTCCTGTA 180  
50 ATTTAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA 240  
ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAAA AGTCATAGGT 300

## (2) INFORMATION FOR SEQ ID NO: 1338:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAACATC TCTTACATCT 60  
 TCGGTTGGAA GTTCTTCATA GTCGAATTC ATTGTnTTAT CAAAGTTTTT CATTGCGAC 120  
 ACTCC 125

## (2) INFORMATION FOR SEQ ID NO: 1339:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60  
 CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGAATATGC TTCATATCAT T 111

## (2) INFORMATION FOR SEQ ID NO: 1340:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTTAACAC CATGTTTAGC CAATTTGTCT 60  
 GCTAAATTAA TCGTGTGTTGT CCTCCAAATT GACACGCACC TTTAGTTTTT CTAAATAATG 120  
 ATATCATCAC ATCTCTCAGT TAAAGGTCAA AnATATTG 158

## (2) INFORMATION FOR SEQ ID NO: 1341:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTCGC AAACAAGAGC 60  
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120  
 GTAAACAAT TATTAGCATA CAAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180  
 10 TAAGGAGGAA TTTTATATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240  
 AAAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATACATTAT ACAAAGTAGC 300  
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTCCGT GACCGTCGTC AACGTAAACG 360  
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

## (2) INFORMATION FOR SEQ ID NO: 1342:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

25 GTTGAACAAG GGCAACAAAA ATTCGAGCG AACAGATTT TTGAATGGTT ATATCAAAAA 60  
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120  
 GATAACTTTA CTGTTACAAC TTAAACAAC GTAGTAAAC AAGAAAGTAA AGACGGTACA 180  
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AACTGTTTT AATGAGACAT 240  
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300  
 TGTGCTTCTA CACTTGCGCG CTTAAAAAGA AACCTGAAG CTGGCGAAAT TGTTCACAA 360  
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

## (2) INFORMATION FOR SEQ ID NO: 1343:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

50 GAAAATTTCA TCAGGTGTTG GCgTGAACG TACATTCCCA TTACACACAC CAAAATTGA 60

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180  
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACITTTTA TGGAGTGATA 240  
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCTT 300  
 CTCTATTCAT AACGTGTTTG CTCAAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360  
 10 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTAnA 399

(2) INFORMATION FOR SEQ ID NO: 1344:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 134 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCAnTA 60  
 TCTAGGCCTT TAGGTTGCCA TAGTACGAGA TGTAGAGGTA CTAGAGGAAT GAGTGTCGCT 120  
 25 AAAGTTGTCTG TCGT 134

(2) INFORMATION FOR SEQ ID NO: 1345:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60  
 40 GCACAATAGA TGATCGCAAG TCGnATCATC ACACAGTACT GAAGCAAGA 109

(2) INFORMATION FOR SEQ ID NO: 1346:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG nACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTTG TTTGCATAAG 60

## (2) INFORMATION FOR SEQ ID NO: 1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAAC 60  
 ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120  
 AnTG 124

## (2) INFORMATION FOR SEQ ID NO: 1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60  
 GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTTAA 120  
 CCCC GTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180  
 TAAACGTTTC TTCTAAATTT AATAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240  
 AAaTGtATAT TaTTCATATT CACTTCTnAT TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300  
 ATGChTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

## (2) INFORMATION FOR SEQ ID NO: 1349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTTGTTGGCA CATCATTAAT ACCTGTAATT 60  
 TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120



## (2) INFORMATION FOR SEQ ID NO: 1350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTTT ATCGTCCCAC TCTTCAATCC 60  
 ATTTTTTAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTCTTTATG 120  
 ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT 180  
 TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTTGct TTAGCAACTC TTTCAACATC 240  
 ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGGTTTT AAAATTGAAG AATCTTTAGT 300  
 TATATCTGAA ACAGCAATTC GTTGTATTCC TAACTTTATA AAATCACCAA CATAAAATCC 360  
 AGTTAATACA GCAACTCTTT TAAGGTTCTC nGGGACTTT 399

## (2) INFORMATION FOR SEQ ID NO: 1351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTTGAAATT ATAGGTCATC 60  
 TCTGGTATTC TTGTACGATT CTTTTTCCAA TCTAAATCAA AGTTTTCAAT TTCTTCTTTT 120  
 GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT 180  
 GACCCTTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTAATTACT CACTTGTGaA 240  
 ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATTT 300  
 GTTAATTCAA TCGCAGGTTT CATAAATTGT GGTGTTAAAT AGTCAATAAC ATGATTTAAA 360  
 ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA 400

## (2) INFORMATION FOR SEQ ID NO: 1352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60  
GGGCTGCAGG AATTCGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

(2) INFORMATION FOR SEQ ID NO: 1353:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

20 AGTTCAGGAG AGTTATAAAT ATTAGGGTGG TACATGCCCC AAATCATTGG AATTGTTAAA 60  
GTAGATTTTA CAGTTTAGAG ATAACAGACA TGTCTATATG AAGGGCTGTC TACCCTCGTA 120  
AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

25 (2) INFORMATION FOR SEQ ID NO: 1354:

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTTGTAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTCAT CTTACATTT 60  
AGTTCCTTAT TTAAGAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120  
CACAAAGTTC ACAAGAnAAT ACACTTTTGA AAATATTGG 159

40 (2) INFORMATION FOR SEQ ID NO: 1355:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

CGnCTTCCTT CAACCATTTGT AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

## (2) INFORMATION FOR SEQ ID NO: 1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60  
 CAAATTATAG ATGTCAACAT GTTCTTCGA CACCTACAAA AGATGCACAA 110

## (2) INFORMATION FOR SEQ ID NO: 1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60  
 ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120  
 GTTGAAGATA TCG 133

## (2) INFORMATION FOR SEQ ID NO: 1358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60  
 ATATATCAAA ATCATTAAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120  
 GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTTAGATTTT GATCATATAG 180  
 ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240  
 TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300  
 GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAACTA TTTAATGAAA TTTCCAAATA 360

## (2) INFORMATION FOR SEQ ID NO: 1359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTTTAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTTGTGTTT GAAGCGGTTA 60  
ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTCG TGAAATGACA TTTGTTAACT 120  
CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180  
CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240  
CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAnC TnTAATTGGC nGGCTTTTTT 300  
GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360  
TTTCCAAAAT TGCACCATAG GAATGGGTGG AT 392

## (2) INFORMATION FOR SEQ ID NO: 1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTGT TTATTATCTG TCTCTACTAG 60  
ACTGTAACCT CCAACATATC TGTTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120  
GATCTGAGGG CCAACTGGCA TGTTGTCAAC TTATGATATT 160

## (2) INFORMATION FOR SEQ ID NO: 1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAAGTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TGCGGAATGC 60

ATATTTATTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT 60  
 GTATCTGAAT TTTTAAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG 120  
 TGGCGACAGT GTACGTATCA GACTTAG 147

(2) INFORMATION FOR SEQ ID NO: 1363:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA 60  
 ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA 108

(2) INFORMATION FOR SEQ ID NO: 1364:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTGGTACC GCGAATTGAA TAATTTAAAA 60  
 CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTTAT AAATTTTGGA CCTCTTGAAA 120  
 AAGTTACGTT TTCAAGAGGT TTTATTTATC CTA 153

(2) INFORMATION FOR SEQ ID NO: 1365:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

TAAGAGAATT ATATGCATTC CAAACGAAAC nAACAGAAAA ACGGACCAAA CTAAGTGTCA 60  
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA ACACTTACGT ACACACAAAA 120  
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAACTACTT 180  
ACGT 184

15

(2) INFORMATION FOR SEQ ID NO: 1366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

ACATTAGATG GGTCAATCAT GTTATACACG GTGATTTAGG GGAGTCAATC AAATATAAAA 60  
GGCCCGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT 120  
CATTAATTAT TACTTATATT ATCTCATTG CTTTAGGAAT AACGTCAGGT AGATATTCTT 180  
ACAGTTTGAC GGATTATACT GTGCAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT 240  
TTATTGCGGG AGTATTTGCA ATTTnTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC 300  
AAGGTTCTGT TGATATTAAC CTAAAGAAG GTACTTTTGA ATATtATATG AGTAAAATAT 360  
ATCACACATT TTTACCTGCA TTCACTTTAG GTTTATTATC TACTGCTGGT TATAWTCAAT 420  
ATTTACGTAA TGatATTATT GAAAATTCTA AA 452

40

(2) INFORMATION FOR SEQ ID NO: 1367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 141 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

TTGTGAGTAA TTGGACAATA TAAGTGTGG TCTTGGATGG CATATCCTTG GTACGACCTG 60  
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC 120

55

## (2) INFORMATION FOR SEQ ID NO: 1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60  
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CCGTATCAAA TCATTCTATn 120  
 ACTTAG 126

## (2) INFORMATION FOR SEQ ID NO: 1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTTACA ACACAGGGCA CATACGGGTT GTGTTTAGGT 60  
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120  
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

## (2) INFORMATION FOR SEQ ID NO: 1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60  
 ACCAATGACA CGTCAATTGC TAATGACTAT TTTAATAAAC CGGCAAAGTA CATTAGAAA 120  
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGAATGAGT 180  
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACACTG CCAAAGATGA ACGCACTTCT 240  
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300

AATGGACCA<sub>n</sub> CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

(2) INFORMATION FOR SEQ ID NO: 1371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

CATCAAGAAC ATGTGAGACC ACAATTTGAA TCACTTGAAA AAATAAATAA AGACATTGTT	60
GGATGGATAA AATTATCAGG AACATCATTA AATTATCCAG TACTACAAGG TAAGACAAAT	120
CACGATTATT TAAATTTAGA TTTTGAGCGA GAACATCGAC GTAAAGGTAG TATTTT <sub>y</sub> ATG	180
GATTTTAGAA ATGAATTGAA GAATTT <sub>n</sub> AAT CATAATACTA TTTTATACGG GCACCATGTC	240
GGTGATAATA CGATGTTTGA TGTGTTAGAA GATTATTTAA AGCAATCGTT TTATGAAAAA	300
CACAAGATAA TTGA <sub>n</sub> TTTGG CAATAAATAT GGTAATCTCC ATTGC	345

(2) INFORMATION FOR SEQ ID NO: 1372:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

TTGAAAAGCA GTTTGGATTT ATGCTCAAAC CATGGACGAC GGTTAGGTTT ATGAATGTTA	60
TTCCAAATAG GTTCATCTAT AAAA <sub>A</sub> CTAGT GGAAAGTGA AAAA <sub>A</sub> T <sub>n</sub> AGT GGACCTTCGA	120
TAATACGATG TATTTATCGT TAGAAGCAGT AATA	154

(2) INFORMATION FOR SEQ ID NO: 1373:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 136 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

GAGCCTAATT ATTCAAGCCA AATCGCATAT GAAATTGATA AAGAAGTTCA ACGAATCGTT	60
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CTATACnAGA ACTATC

136

## (2) INFORMATION FOR SEQ ID NO: 1374:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

15	ATCTTTAACA ATTAAACCA TACTATCTTG AATCATCATC AAATTTAACG CATGTGCGTC	60
	AAGTTGTTTC ACTTTAAAGA CTTCAATTATT AAGACCGACC TTAGACTGCT TTTTAAAAAT	120
	AGGTACATTC GTAATCATAC CTATACTTTG ATTGTCTAAG TGTAATTTGT TTTGGTGATA	180
20	TCGATTATAA TCTTGTGCAG TAAAAGCTGT AATCATTACT GATTGTCTTG AAAATATCGC	240
	GCCTTCATTA CCAATGAAGT CTATTGGAAT aTCATCACTA GCCTGTTTTA ACTTGTAATA	300
25	AGCACGATTC TnTTCTAAAG AAGCTCTAAA TAATGTCGTT TCATATACTT TGAAGTCT	358

## (2) INFORMATION FOR SEQ ID NO: 1375:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

35	ATATTGTGTG CTAAATTTGC TTAAGTATGT TTTTGTGTTG nAAGTAAGCA TATGTTATTG	60
	TCTTTTTAAT TGTTGTAAAA GTGCTGTTTT CATAGAATTA ATATCAGACA TCTTTATTAG	120
40	TA	122

## (2) INFORMATION FOR SEQ ID NO: 1376:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

55	CATTTTCTTC GGTTTCTGTC TTTTATGCG TAGATTTATT TTCTTGTCT TGGTTATTAC	60
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CGATAATTAC GATGGTAATA AGAAGTTTTT TCAAATATAA CGCCTCCATG TTAATGAAAA 180  
 GTAGTTGATA CGTGAAGCTA AATAATTnAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240  
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCAATTGT TTTTGTGTAC TTCAATTAGT 300  
 ATAACAAAAC TGTTATGTAT TTATAAATAT AATCATTAGT ATTTTTATGG CTGAAAAAGT 360  
 TATAATAAAA GTGTAAGGAA TAAAAATATT GTATGGAAAA GAGAGATAAT TATGAATAAA 420  
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

(2) INFORMATION FOR SEQ ID NO: 1377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTTATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60  
 25 TTTATnAAAAG TGTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120  
 GCTTGGGA 128

(2) INFORMATION FOR SEQ ID NO: 1378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

GGACGCTAGA GGATCCCGGT CTGGAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60  
 40 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120  
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180  
 45 AATGAACTTT AAAGGTTCTA TAKATGCTTA TCGTCAAKCG GCAACTGAaG CAGGTTTCGA 240  
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300  
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360  
 50 TnGTTGGTTA TCCGAAACAG CAATnGCTAA TTCGTCAAGT 400

(2) INFORMATION FOR SEQ ID NO: 1379:

- (A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTAAACGAC CAACCTTAAA AaAATACGCT CTTATGCATT GGATTAGTCC 60  
TGATTATACA ATTAACTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60  
ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnt CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 114 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

40 TCATGAAAAC ATTTATTTTA AAATTTGATA TTTGTTCAAT AATATTCGAA ATTAACCTnt 60  
GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 165 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

55

CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GntGACTTAA GTAATTTAAA 60

GTTTTCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 111 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTTCAAACAT 60  
CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 144 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

CATTAAATA ACGTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60  
TCTAATTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120  
GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAAATGTA AGCGCAATGG CCATTGTTT 60  
TTTcnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 533 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5	CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG	60
	GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA	120
	AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG	180
10	ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAAGTGGT AAAAGAATTT ATTAAAACAG	240
	TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA	300
	TTAAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAn	360
15	TGTCAAATAA ACCACCTACT GTTGTATGA TGGTTGGTTT ACAAGGTGCT GGTAAAACAA	420
	CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG	480
20	TGCGAGCAGA TATTTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG	533

(2) INFORMATION FOR SEQ ID NO: 1387:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

30	TTATTTACAA GCCATTAATA TATTTTAGGT TTGTTCTGCA TCGATTCATT GGTGCTATTT	60
35	TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG	112

(2) INFORMATION FOR SEQ ID NO: 1388:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

45	ACACCTACAG TTAATAGTAT CAGTGCACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA	60
50	TGATGTATCh TCTTGCCCCAA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC	118

(2) INFORMATION FOR SEQ ID NO: 1389:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60  
TGCTGTTAAT GCAAGTACTG GAAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120  
ACCTnCAATG GTACTTGTTG GGAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 161 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

TTTTTGATCA TGATTTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCTTTCAACA 60  
ATTGCGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120  
AAACATGTGT TTAGATTTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60  
CATTTTTGCC TCCTTATTTT TTGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

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AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120  
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180  
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240  
 GCGAGTTTAG AACATTCTTA GCCGTCTTGT TAATGTTGTT ATTATTTATC TCGATTTTCAT 300  
 TAGTTATCGC ATCAnCCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360  
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AACnCGCAAA GA 412

## (2) INFORMATION FOR SEQ ID NO: 1393:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 186 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCAANTGGA TTGCAATGAG TTTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTA 60  
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120  
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCCAC GGACTGCACA 180  
 TACTGG 186  
 30

## (2) INFORMATION FOR SEQ ID NO: 1394:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAAAGTC AACAAATTAC 60  
 GCGATATGAA AATTTGAATA ACAATTTGnA AAAGCATGCT TCCGATAATC AGCAAGCC 118  
 45

## (2) INFORMATION FOR SEQ ID NO: 1395:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60  
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120  
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAAAT TTAATGGCCA TTGGG 175

(2) INFORMATION FOR SEQ ID NO: 1396:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAAACTTAG ACGATTAGTA TCATATATTA GAACACnGCA CCGAACTTGA AATCATGGCT 60  
 20 GATATCGCAC CTTGAAGAAG CAAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120  
 CTTACATGGC AT 132

(2) INFORMATION FOR SEQ ID NO: 1397:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGCGTTG 60  
 35 ATTTCTTACT TTAGGTGTAG GACAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120  
 T 121

(2) INFORMATION FOR SEQ ID NO: 1398:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

CGTTTCGTATA ATCTCACTTG CATCnTGAAT TGAACAACAT CCTGTCATTT TAAGACTGCT 60  
 50 AAAnGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120



AAACACCTCA TCCAAAGTTC AG

202

## (2) INFORMATION FOR SEQ ID NO: 1399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTTAA ATCTATCACA 60  
 GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120  
 TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

## (2) INFORMATION FOR SEQ ID NO: 1400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 107 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60  
 GnCTTGGCGT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

## (2) INFORMATION FOR SEQ ID NO: 1401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

TTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60  
 TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

## (2) INFORMATION FOR SEQ ID NO: 1402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60  
 5 ATACAATGTT GAGTAAATAA TGGCGATGCA GATGAATAAC TA 102

(2) INFORMATION FOR SEQ ID NO: 1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCACTAGA TATAGCATT AATATATTTT 60  
 20 CATCCCCyTG AATTTTAAAA ACTTTTTC AAGCAACACC TCTAAAAATA AATaCAATAT 120  
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

(2) INFORMATION FOR SEQ ID NO: 1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60  
 35 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTTAT ATTTCT 106

(2) INFORMATION FOR SEQ ID NO: 1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTGTGCA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCACT GCTACTGCGA 60  
 50 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTGCA 120

CTTTAATAAG CAATTTGTAC TGA CTGTGCA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240  
 ATACTATnGG TGCGAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300  
 TCAGGAACC 309

## (2) INFORMATION FOR SEQ ID NO: 1406:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTCAA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60  
 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120  
 ATGATTCTTC ATGGAAnGTA TAGG 144

## (2) INFORMATION FOR SEQ ID NO: 1407:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60  
 TCAACnCGTT TCACTTGTAT AATTTGTTTT TGTAATTGGT GAAGTCATAG TATAG 115

## (2) INFORMATION FOR SEQ ID NO: 1408:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60  
 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTTAC ATTTT 115

## (2) INFORMATION FOR SEQ ID NO: 1409:

(A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

10 AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60  
 TTCATGATGC ATTCGGTATG CCAATGACAA AGCAATATAA AGATAAATTn CAAGAAGATA 120  
 AAA 123

15

(2) INFORMATION FOR SEQ ID NO: 1410:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

25 CTnTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60  
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

30

(2) INFORMATION FOR SEQ ID NO: 1411:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

40 TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60  
 AGTTGGTAAA ATCAAATTTT GACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120  
 GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCGGTTTT 180  
 45 TAATTTGCAT TAAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240  
 TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300  
 ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GnATATGCAA 360  
 50 ACAGTTATGA ATGAGAAATT AGCGAAATGG TTGCTGAAA ATGATTACTT TTATAATCAT 420  
 GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTGATTA CAATGAACTA AAGGCAAAAT 60  
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAGT ATGGGGTCAA GTTTAGGG 118

(2) INFORMATION FOR SEQ ID NO: 1413:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGGCC 60  
 CAnCCACTTG CTGTGTTGTA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120  
 AGTATGAATA TATATATCTA ATATTAAAAC GGCAATATTT ATATGGTATA CATTTTTATA 180  
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240  
 GATGA 245

(2) INFORMATION FOR SEQ ID NO: 1414:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60  
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120  
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180  
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240  
 CTACCTACCA GA 252

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AAAGTGGCTT TAGAAGGTCA AGATATAGAA 60  
 GnTATTAAAT CTAAGAAAAGA AGGAAGTGA AAAAGTGATT CCAGGAATTT TC 112

## (2) INFORMATION FOR SEQ ID NO: 1416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60  
 ATAGCGCAAA TGCAATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120  
 GAAC 124

## (2) INFORMATION FOR SEQ ID NO: 1417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60  
 TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTITAGGTA GCGTCAATAT 120  
 T 121

## (2) INFORMATION FOR SEQ ID NO: 1418:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

5 CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60  
 GCAAATTAGG ACAAGTTGAT GAGTAACTAC NGCCAATATC GGTAAGTTTC ATGGCGGTTC 120  
 AGC 123

(2) INFORMATION FOR SEQ ID NO: 1419:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

20 CTTATAATCC TTACnGCAAT TTCACCTTGT ACGGAATTAA ACAACGGAGG CATTACTTA 60  
 CCCCCTTTAC TTAATACGTA CCAAAACTTG GTCGTATTCA ACCATTGGG 109

(2) INFORMATION FOR SEQ ID NO: 1420:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

35 GCTGThGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60  
 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATT 120  
 A 121

(2) INFORMATION FOR SEQ ID NO: 1421:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

50 TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTTAAT ACCATCGCAA 60  
 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAAATAT 120

## (2) INFORMATION FOR SEQ ID NO: 1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAAA TTTATCGAAT GATTTTCATT TGCCATGATC 60  
 AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

## (2) INFORMATION FOR SEQ ID NO: 1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60  
 ATACGTTGGT CACCGTGAAT AATTTACCA GCTGCATTTh TCCATGGACC A 111

## (2) INFORMATION FOR SEQ ID NO: 1424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60  
 TTGATTTGAC CTTGCATATC TTTCACATTC TTCGAAAATT GATCAAAGCh CTATTGAAAA 120  
 ACCGTATCAT ATACAAACCT CTAATTTTTT TGAATAACAA AAAGAATTCT TTGACGTATC 180  
 AACTATATCA TCATGACTTC 200

## (2) INFORMATION FOR SEQ ID NO: 1425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

5 TTTCTATAAT TTTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60  
TnAAATTTTG GTCAATTAAC AAAGTTAGTT TGTtAAAACG TATACTTTAA TTATTCCGG 119

(2) INFORMATION FOR SEQ ID NO: 1426:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

20 AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCGA CGGCAAAGAT AACTAAAGG 60  
CACCTATTAT CGAACATAGT ACTCCTAnCG GACCTGGAAT TTAAATCAGA GCGGCC 116

(2) INFORMATION FOR SEQ ID NO: 1427:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 212 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

35 TTTTATTTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60  
TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120  
TTATTCTTTA TTAAAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180  
40 GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

(2) INFORMATION FOR SEQ ID NO: 1428:

45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 265 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear  
50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

55 GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180  
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240  
 5 TGACGnTTTT AACATCAATA ACTGG 265

## (2) INFORMATION FOR SEQ ID NO: 1429:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAAGCTAA AGAAGAACGT TTCCATGGAC 60  
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120  
 CACCAAAAAT TGACTTTTCA AGCAT 145

## (2) INFORMATION FOR SEQ ID NO: 1430:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

35 ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60  
 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTTCAGGnA TTAAGTGGAT AGGTA 115

## (2) INFORMATION FOR SEQ ID NO: 1431:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

50 nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTCGATTAT 60  
 CGCACGTCCA TAGTTGGTGA ACAGGAACCT ACACGTACAT CTAATCGCAG ACTATGCGTA 120  
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

## (2) INFORMATION FOR SEQ ID NO: 1432:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTAATTAAAG ATTTCCGGTAT CGTGTCATTT GGCTCAGTCC 60  
 ATGTTTAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120  
 TTGGAACGTG GAGGACTTGA TCGTT 145

## (2) INFORMATION FOR SEQ ID NO: 1433:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGTTTTGG TATTTCTATT CATATACAAG 60  
 ACCATACCTT TAACTTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTTT AGAACCAATA 120  
 ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCAC GATAACCTn 169

## (2) INFORMATION FOR SEQ ID NO: 1434:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCn TAAAAATCAC 60  
 TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

## (2) INFORMATION FOR SEQ ID NO: 1435:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60  
 5 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

(2) INFORMATION FOR SEQ ID NO: 1436:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60  
 20 AAnGAAAAGT TTAGATTCAC ACGCCATCAC AATGGATTAG AAAAACCGAA TTTCTTCAGC 120  
 AATTCTACAA TTTCTAGTAT ACGC 144

(2) INFORMATION FOR SEQ ID NO: 1437:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60  
 35 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

(2) INFORMATION FOR SEQ ID NO: 1438:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

AAAGATGGTG ACATTTTCATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60  
 50 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

AATTTAGAGT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240  
 AATTTCAAAC CTAAGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTTC nTAAAGTGTG 300  
 CAAAATAATT TGTCGCTTTA G 321

(2) INFORMATION FOR SEQ ID NO: 1439:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60  
 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120  
 GAAnGCCATT GCCAC 135

(2) INFORMATION FOR SEQ ID NO: 1440:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTT ATTTCAAACT TCTATTAACC CTATTCAGTA 60  
 GGTITGAAAT TAATACTATC AGAAAAATAC ACATTTnCTT CTTTATTTCT 110

(2) INFORMATION FOR SEQ ID NO: 1441:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGCnGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60  
 TGAATTTTGG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120  
 AATCCCATGT GTTTGATAAA CCACCGTAAA TATCACTACC AGGGAACACA AAACCTCTGT 180

GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTA~~CT~~TCCAT GGGACGAGTT 300  
 AATATTTTAA ATTGTATATA ATACAAA~~n~~A AGT~~n~~ACGTAT TTAACCCGCG GTTCCACCCA 360  
 5 AATTAGTGTA GTCAC~~T~~CGCT TTTATTTTAA AATGATT~~C~~GT TGC~~G~~CCAATC TTATTGTTAA 420  
 GCTTACACTA TCCTTA 436

10 (2) INFORMATION FOR SEQ ID NO: 1442:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:

20 ATTTTTAGAA GCATACTGCG AACGTCATCA CATCGATTTA CATATCAAAA AGTTAGATTT 60  
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GCTCGAATTA AACGTTACGA 120  
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCATTT 180  
 25 GGACGATCAA TTAGAAACTA TTATGTATCG TATTTTTAnT GGGAAATCAA CACGTAATAA 240  
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300  
 TGTCTCTAAA AAAGAAATAr AACAA~~T~~TCCA AGAGAGATAT CATATTCCAT ATTTTGAAGA 360  
 30 TGAATChAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAA~~n~~AGAA TTATTCCAGC 420  
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTTATTA A 461

35 (2) INFORMATION FOR SEQ ID NO: 1443:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 143 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:

45 AAAGGTGATA AAAAACAAAG GCATTGTAAA TTA~~CT~~TGAAA ACCAAGTGAG TTATTACACG 60  
 ATTCTAATTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120  
 50 GGGGGTTAGC GTGGAnTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 90 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

1743

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

10 TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTCACAAGA CTTAGAAGTA TATGTACACA 60  
GAAATGAGAC TATATATCAT CAAGCATATA 90

(2) INFORMATION FOR SEQ ID NO: 1445:

15 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

25 ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60  
CCTGACTTGC TGTAAGATGT GCATTGCCTG TGACCAGTTA ACTGCTGTTT GTACATTATG 120  
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTAAACATTG TGCTGCTAGA GCCATCTTTT 180  
AAAGATGTTT GGACTAACGT nCATGATGTG AATATCTG 218

30 (2) INFORMATION FOR SEQ ID NO: 1446:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAACTA TGTTTTCAAA TTTATTTATT 60  
GTTACTGGGA ATTTACATT ATTAGATTTA TTTATTTTCT TTTGA 105

45 (2) INFORMATION FOR SEQ ID NO: 1447:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:

AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

## (2) INFORMATION FOR SEQ ID NO: 1448:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAAC TGAAGAAntA GCAGTGCAAG CAGGATTGTT GATATGACAA CATTCGAGTC 60  
AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCACG TGCA 104

## (2) INFORMATION FOR SEQ ID NO: 1449:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 349 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCACT 60  
TTTTATCTTC ATATACATTA ATTAACCACC KTCAAACATT GTCGTTAGAT TCGCCAAATT 120  
GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC 180  
GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTTAT TAGAATAACC 240  
CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAT GGCTGCTGGT TTTTtaggTA 300  
AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGChAC GATAAAGCC 349

## (2) INFORMATION FOR SEQ ID NO: 1450:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAATGATT GAATTTCTAG GAATTGAGTC 60  
ATTAAAAAAA CACTTGAAAA ATTCAGGTGG GATTGCGCTA TTGCCGGAAT TTATTGTTGC 120



AGAAACAACA TTGaTAATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTTGTAAA 240  
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300  
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360  
 TAAGGnTAAT TCCAGGTTGA ATTCCAATTG CGGGCATCAT 400

(2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TCGGTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60  
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAA 120  
 TTnG 124

(2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

35 TGTATTAAAA ACCTTCCACC TTAAAAAGCA ACAATGCGGT GTCCTTTAAA TTCAAACATA 60  
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120  
 40 TnATTT 126

(2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

50 ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60  
 55

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180  
 TGTAAGAAAT TAAAATCTTT TGAAGCATT A GATTACTTA TCATTnTAA ATTTCAATTT 240  
 5 AAACCTAACAG TAATTTATGT AGCTTTTnA ATTCTCATAA 280

## (2) INFORMATION FOR SEQ ID NO: 1454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCTTTA AATTAACTG ATCACTTGAA TAATTAACAT TACTTAATTC TATGGCATTG 60  
 20 ATGATGATTG CTCCTCATAA ATGAACGTTA AAATATCCTG CAGTTCCTCA AGTGACATTT 120  
 CGATGGCTTG CGCTTCATTA ACCAATTCTT TAACCAAAATT TTCAATGGTA AAAAATTGTT 180  
 TCTCTTTTAA AATAGGAACT ATTCTnGCT CCTTAACAAA GgCCCTTTT CCTCTAATTG 240  
 25 TT 242

## (2) INFORMATION FOR SEQ ID NO: 1455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60  
 40 TTGATGTGAC AGATCAAGTG AGACTTGCAT AnTGGTATTT TATTCAGATG 110

## (2) INFORMATION FOR SEQ ID NO: 1456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAGTGGTT GCCTTTTTTAA GTCCCGCGTG GGACAAAAAT TAACCTCTTT ACACTTGCAA 60

AAAGCGCTTG CAATATATTT TCGATTGTt ATTCAACmAA ACGTTTTATT tTATTCGCTG 180  
 TAGTCAAATG TATACCCTTA TACTGACTCG aTAATCATTT GCTTATnATT TGAGActAGG 240  
 5 ACATAAATca ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300  
 TGCACTTGTA ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTTGAA 360  
 10 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420  
 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCACTATC CGTAAAATAA ACAACTAACT 480  
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540  
 15 AACCTAATTA A 551

## (2) INFORMATION FOR SEQ ID NO: 1457:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATCnGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTCAGGA CTGACCAGCA 60  
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

## (2) INFORMATION FOR SEQ ID NO: 1458:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60  
 45 TAGATTTAGn AATCCAAACT CATAACACCT CCACCATTCC ATCACATCTG GA 112

## (2) INFORMATION FOR SEQ ID NO: 1459:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

CCCCAACCAA TTTTAAATAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60  
 AACCCCAATT TTGGCCAATT TTAAAGGGAA GGCCTTGGA CCTTTTGGG AATGGGCCGG 120  
 5 TTTTAAACCC TTGGTTTCCG GAAGGGGAAA ATTTTAAATA AAACCGGAAT TGGTTGGCCC 180  
 CCTTTAAATT AAAAAGTTCC CTnAAAAAnA AATCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

TTTCGACAAT CAATTCGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60  
 ATAATACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCCACCA TAATAATTn 120  
 CATATGTTCA TCACC 135

(2) INFORMATION FOR SEQ ID NO: 1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60  
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

(2) INFORMATION FOR SEQ ID NO: 1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAACG 60  
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTTCGGACTT TGGTAAAATT GTGAACGCTG GntGAATGAT TTTTGTTTGA 60  
 CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120  
 GTTCTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

(2) INFORMATION FOR SEQ ID NO: 1464:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60  
 TAGTTTTGCA TTGCAAATT TTAAGTGAACC GGTTTAAACG AAT 103

(2) INFORMATION FOR SEQ ID NO: 1465:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60  
 AAGTAGCGTG GAAAATATTG TATCTTTCTA AATGTACACG TTAGAAnTCA TGCTTATGTA 120  
 TTACACGCGG GGCCTGGTA CCTAAGGGCC TAT 153

(2) INFORMATION FOR SEQ ID NO: 1466:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTCATACA TTTTACTTTA 60  
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120  
 AACC 124

## (2) INFORMATION FOR SEQ ID NO: 1467:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

AAGGAATTAA GTTTGCGACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60  
 TAATTGAATA ACCGATATAT AAGAATATAC CTAATAAAC ACTGACAGTT ACTTGACCTT 120  
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180  
 25 GTTCACCTTT GAAATAATTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240  
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300  
 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354

## (2) INFORMATION FOR SEQ ID NO: 1468:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

TGCAAACTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60  
 CACTCTATAA TATGAATTAG GGTTTACAGT TTTTGGAGTA TTTTACAGTA TCAAAGTTTA 120

## (2) INFORMATION FOR SEQ ID NO: 1469:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TCTAAATGCT GACTAAAAC AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA 60  
 GTGATTCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA 120  
 5 ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC 180  
 ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC 240  
 10 TTGCGAACTA AACCCATTTA ACTCACCTTT ACCTTTTTAT AATTGAGACA CTAATGCTTC 300  
 AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCCGC 360  
 TTCTCCATTT GCTAAGTCTG AACTGCACG AACTACAACA AATGGTACAT TAAATTGATA 420  
 15 ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTG GAAATG 476

## (2) INFORMATION FOR SEQ ID NO: 1470:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

CACCATACAT GGGTAAGGAT ACTACTCAA TCAACTTGAA ACCAATAATn CATGACCATA 60  
 30 TGTGTGCCAA TGAATTCAAT TGGAAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT 120  
 TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAAT 156

## (2) INFORMATION FOR SEQ ID NO: 1471:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACTTAA AAAGCACTTT ATCAGAAAAA 60  
 45 GCTAAGAAAA AAGATTAATA TTCATTCAAT AAATATAAAT CCAATTTAAT TTGTTGTTTA 120  
 AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG 180  
 50 AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA 240  
 AGTTCACCCCT CTTCAATGAT TCTGTTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA 300  
 CCGTTGTTAT TAAACAACTT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA 360

## (2) INFORMATION FOR SEQ ID NO: 1472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG 60  
TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

## (2) INFORMATION FOR SEQ ID NO: 1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAAT ATCTATAACA CCGAGTTCTT 60  
CCATTAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

## (2) INFORMATION FOR SEQ ID NO: 1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60  
CGGAGCGATT GTATTGCATG AAGGTAACAT TCGCGAGTGC CAACAGGCGA AGTAAAACTT 120  
AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

## (2) INFORMATION FOR SEQ ID NO: 1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

5 ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60  
 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAACATT CGCGCACAAA ATGAGCTCAG 120  
 GCGCCTGCCT TGCCCATTTT TTAAATTATT TCCCTGGAAA TGATTCGCTG TGTGCTGTTC 180  
 10 TGTCCACAAC AACACGATTA ATGCCATGAC 210

## (2) INFORMATION FOR SEQ ID NO: 1476:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

20 AGGGTGATTT CACGGTTCGT CTGCCCATTT AATTGCGCAT TTTGCACACC ATCTACCGTT 60  
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnT GCAAGTGCAT 120  
 25 GCTCTTTC 128

## (2) INFORMATION FOR SEQ ID NO: 1477:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 641 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

35 AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60  
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTGTTAC 120  
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTTAATACG 180  
 45 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTTCA ATATCGATTT TGGCACATAA 240  
 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCAGCCCAT AATCTTCATT 300  
 AATTACAGCG TGATTCATCT ATTATTATGT TATAAATkCT ATCTATAAAC GTCACTTTAT 360  
 50 TAAATAACTC ATGCACTTTA TTAAAAATCC TCACAAATTT GAATATACTT AATTAAATC 420  
 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTGCTT GCAAAGACTC 480  
 AATTTCAATTT GAAATAGTTA AAGTAGAACC TATATnAAGC ATTTGTCTAG CTAAATTATA 540  
 55

GATAACTCTT ATCTTTTTCa ACTGTAGGTG ACCTTTAGGG C

641

(2) INFORMATION FOR SEQ ID NO: 1478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 121 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATn CATGCTCTGT TATGGATGAC AAGACAAAGC 60  
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120  
 C 121

(2) INFORMATION FOR SEQ ID NO: 1479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60  
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120  
 CATAGCATTa TTn 133

(2) INFORMATION FOR SEQ ID NO: 1480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 201 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTTAAATTTT AAATTCCCCn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60  
 CTTTTAAGGG GTGGGGGTTT TTTTAGGGAA AAAGGGGCCC GGGGTTAATG GTTCCCAAAA 120  
 AATTGGGGAA AATGGCCCCC CAAATTTTAA ATTCCCGGTT TTAAAATTGG GGTGGGTAA 180  
 ATTGGAAAAA CCCCCAAATT T 201

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGA CTGAAAA TACGGCGTTA TTGGTGGTGC 60  
ATTACCGGTA AATATGTTGC ATGACCAGCA AGTTTGGnC TTCTGATGCA CC 112

## (2) INFORMATION FOR SEQ ID NO: 1482:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAAGTGATC 60  
TTCTGGTGTT TTA CTTTTTA TAAATGTTTT CATATATTC ATATGTATAA AAATGGGATT 120  
TAGCGTA 127

## (2) INFORMATION FOR SEQ ID NO: 1483:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60  
ATTATATCTG CATGGGCGAT ACT 83

## (2) INFORMATION FOR SEQ ID NO: 1484:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTGAA AATTTACAAC 60  
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTTAGTGGTC TATTGTGGGT TTATTGGTAT 120  
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180  
 CCAACCAAAA ACCAGGCCAA G 201

## (2) INFORMATION FOR SEQ ID NO: 1485:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60  
 ACAAGTCGAT AAAGGAGCAC CATCATTAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120  
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180  
 25 TTnCATGACA GAGTGAACCT CAACAGCGGT 210

## (2) INFORMATION FOR SEQ ID NO: 1486:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60  
 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CCnACATGGA 120  
 ATGCAACCTA TGACTTGGAT GGAATTAGAT GAAGCGGG 158

## (2) INFORMATION FOR SEQ ID NO: 1487:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

114

(2) INFORMATION FOR SEQ ID NO: 1488:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT 60  
 TGGGAGATAT CGTTGTACCA CATGTTGATC AACTAACGTT nCCACATG 108

(2) INFORMATION FOR SEQ ID NO: 1489:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

CAAnACGTAA TTTCATGATG AAAGTGGTCG ATAATTTCTT GAAACATCGC TTTCAGTAAT 60  
 AACGCCTGCT TTAAGGTCAC GTTCCGCATA GGTGTACTGA GGATGTTGAT GT 112

(2) INFORMATION FOR SEQ ID NO: 1490:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC 60  
 TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG 120  
 AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTCGGG TAGTGATGTT CACAATTTAT 180  
 ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCGCGA 240  
 GCGACGCCAt AGTTATTATG TCTAT 265

(2) INFORMATION FOR SEQ ID NO: 1491:

- (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

10 CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60  
 CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

(2) INFORMATION FOR SEQ ID NO: 1492:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

25 ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60  
 CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120  
 ACTCTCATTT TGAGAAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACTGA 180  
 30 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTTCGTCAT CTTGAATCAT 240  
 TGAAATGATC AATTTTCATGG CGnnAAAATG CCGTCT 276

(2) INFORMATION FOR SEQ ID NO: 1493:

35

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1493:

45 GATGACGAGC GCCAATTATG TCACTTTTAT GGCAAAGCT GGAACATAAC AACChAGCCT 60  
 GCCAGTAAAA TTGGCAATTG GGACGTTCTT AGCAGGTGCG TCATACATAC 110

(2) INFORMATION FOR SEQ ID NO: 1494:

50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

5 AAAAAAAGG TTTTACCC GGAATTCAA AnTTTAAATC CCTTAAAAA AATTCCGGCC 60  
 AACCCCAAA CCCAAGGTTT TTTCTTAAC CTTGGAAnTA ACCAAGGTTT TTTTCCAAA 120  
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTAAAGGTT TAAAATTGG GGGGGGAAAA 180  
 10 AGGCCCTTTT AGGGGGGGAA 200

## (2) INFORMATION FOR SEQ ID NO: 1495:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

20 AAAAAATTG GTGCATTTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60  
 25 TGTTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120  
 TTGGTGTCCG GGTGACAAGA CTTGGTGGCG CGGTGTAGTT TGTCAGTTGT GTGGTCATCT 180  
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTTACTAAT TCTGCAAGTA 240  
 30 CACGTACGC nnT 253

## (2) INFORMATION FOR SEQ ID NO: 1496:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

40 ACGCTAGCTT CTGAAAAAAT AAGTGAActA TGGATGCAAT GAnCCTATTC CTGAATGATA 60  
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

## (2) INFORMATION FOR SEQ ID NO: 1497:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- 55

AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATTATGAAAAGTT 60  
 GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

(2) INFORMATION FOR SEQ ID NO: 1498:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAACCTTTG GGGAAGTCAA ACGGTTGTAA TCGTTGAACA TAAAGTTAAA CACATTCTGG 60  
 ATCATGTCGA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

(2) INFORMATION FOR SEQ ID NO: 1499:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATTGTATTT GTGACGATTA TCATTCCAGC ATTAGAATAT 60  
 TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120  
 TCAGGTG 127

(2) INFORMATION FOR SEQ ID NO: 1500:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 560 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60  
 CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTCACATAT GCCTCCTCTT 120  
 TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180  
 GTAGTCACAC AAAAaGCAA CGTTkGTTTCG TAAAAATGTC GAACAAaGAA AnACAAACAT 240



AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360  
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420  
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480  
 TTTATAGATT GAGGCACCAA TTAAATTA TGT CAGAATA GTACCGACCC ATTTACTTCT 540  
 10 TGTTATTACA CTAAATAATA 560

## (2) INFORMATION FOR SEQ ID NO: 1501:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60  
 AAGAGCCACG TTTTGGTTAC TTCGTGGGCG TGAATTATTA TG 102  
 25

## (2) INFORMATION FOR SEQ ID NO: 1502:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60  
 TCGATTGGCT GTTGTCTCTG TTACCCATAG TACTTTTCA TCTGTACTTA AAGCAATACC 120  
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180  
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240  
 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300  
 45 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CnGGAGATT TAAATCTCC 360  
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

## (2) INFORMATION FOR SEQ ID NO: 1503:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 55 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60  
 TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCnTA 120  
 GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

## (2) INFORMATION FOR SEQ ID NO: 1504:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 237 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60  
 CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120  
 25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180  
 CTnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

## (2) INFORMATION FOR SEQ ID NO: 1505:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

40 CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTTAAT AAAGATAAAA GTGACAGTAG 60  
 CGGGAAAACA GGnCCATAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120  
 AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180  
 45 ACATAATAAA TGTTGTAGAA GATATGGGT 209

## (2) INFORMATION FOR SEQ ID NO: 1506:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

5 AAAATGTGGC TATTGATTTT GACTTGGAAC TTTTGAACA TTTCTCTCAA GGATTTAAAT 60  
 GTAGGTAACA GGGCAGGTAC TACGGTACTT nCCTATTTTT TTATGCAAAT TTTAAAAAAC 120  
 A 121

## (2) INFORMATION FOR SEQ ID NO: 1507:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

20 AATGACAAGG TCAGCATTAA AACCATTAA AAATAAACGC GTTATGGTTA CTGGACGTAT 60  
 ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTTAAGC CGAATGTAAG 120  
 GATATTATTA AAAGAnGTAT TTGT 144

## (2) INFORMATION FOR SEQ ID NO: 1508:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

35 CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTTCT TCGTTTCTTC AGATAAACTT 60  
 TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTTAATTT GTGCTTnTTA 120  
 40 ACAAACTCAA TAGCTTGTC 139

## (2) INFORMATION FOR SEQ ID NO: 1509:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 155 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

55 TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

(2) INFORMATION FOR SEQ ID NO: 1510:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAGCT 60  
 ATGAATCTTT CAAGATCTTC ATTGAAC 87

(2) INFORMATION FOR SEQ ID NO: 1511:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC 60  
 CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAAATTCC AATCCTTAAA 120  
 AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTTAATTTT CCCAAGGGAA TTAAAAATTT 180  
 TGGGGTTTTT TnAGGnCCCT TTTGGGAAAA ACCCAAC 217

(2) INFORMATION FOR SEQ ID NO: 1512:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCAnG GACAACGGGC CTCAAAAAGC GGTGCACAAA 60  
 CGTTCCGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A 101

(2) INFORMATION FOR SEQ ID NO: 1513:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AATAGCAAC AGATATCATA CAACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAT TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

55 ACTAGGTCTT GCCACGTTTA TATGCATCT 89

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60  
 GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

## (2) INFORMATION FOR SEQ ID NO: 1518:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAAATA TATGAGAAGA TAAAATGAAA 60  
 AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120  
 TAACCTAAAA AGAATTGGAG ATTAAAATGA TTATTAACCT TGAAACACAA CAAATACATT 180  
 TTGATTTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240  
 ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTTAATAACC 300  
 AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360  
 AAACAAGAAT TGGTCGTTTT TTTAATATTA CTAAGTGGTA CGAAGAAATC CATTCTACCG 420  
 ATGAGAAGTA TGTnATTGCA ACTATTAA 448

## (2) INFORMATION FOR SEQ ID NO: 1519:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60  
 AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240  
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300  
 5 TGAC 304

## (2) INFORMATION FOR SEQ ID NO: 1520:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTTT 60  
 20 TTTTTTTTTT TTTCTGTTGG CCTTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120  
 TTCAACTAAG ATAGCTAAAA TTCTAACACT TATATGTAAA AATTACACTC CATTTTAGCA 180  
 CAAATGTAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAAATA CACAGCTTTG 240  
 25 GTAGGGnAAT GGTCTGGAATAAATAATGTAAT GCCAAGTnTC TGATCATTTA ACATATCACT 300  
 CACCTCCTTC TTCATCTGAT GT 322

## (2) INFORMATION FOR SEQ ID NO: 1521:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60  
 40 GTGATGTGGT ATTTTGCATC GGTCTGCTT GATTCCAGAC ATGTC 105

## (2) INFORMATION FOR SEQ ID NO: 1522:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:

GATCGTATTT CCCAGATGTA AATTCnGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG

118

(2) INFORMATION FOR SEQ ID NO: 1523:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 157 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

CnGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACTT GTAATATTAT TACCCCCCGT 60  
ATAACCCATG TATATCTATA CTTTACCACA TAAAATAATT CCGGGACTAT TTGGCACATG 120  
TTTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

(2) INFORMATION FOR SEQ ID NO: 1524:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTTGATCCT 60  
TGAGTAAGAT TAGTCAAGGC CG 82

(2) INFORMATION FOR SEQ ID NO: 1525:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60  
AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120  
TACTATTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180  
AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAAA AGCAAATATT 240  
CAAAAACCTGA TTTCAGAATT AGAAGAATAC ATTAAAAATT AAATCAAGGT TAATTGCGTT 300



AAAATTAAC TAAAATTTAA ATATTGAAGA GCTTAATTAA

400

(2) INFORMATION FOR SEQ ID NO: 1526:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

ACTGTCTAAT ATTCACTCCC TTAAAGTGTT TTTCATATTT TTCTATTAAT GTTCATATTG 60  
 TAGGGTGTTG AATGCATCTA AGCATTTCAA GTTATTCTCC AAGTTCATCA ATTTCAAAT 120  
 GGAAC 125

(2) INFORMATION FOR SEQ ID NO: 1527:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

CATGTTTATT TATGTTTCGG CTTTAATGTT GAAGAGTTTT ACAAAGTTTA CCGATTGCAT 60  
 TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG nA 112

(2) INFORMATION FOR SEQ ID NO: 1528:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACAAACAAA AAAGTATGA 60  
 ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAACH AACAG 115

(2) INFORMATION FOR SEQ ID NO: 1529:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

5 ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTTTCATGT TTTTGTAAT 60  
 AATGATTCGC TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT 120  
 TTTTGATATC TACTTTTTTC TCTTCCAAAA TTAGCTCAAT CATATCTTTA ATAATTTCTT 180  
 10 CTACTTCATC TTTAGGGAAC CAAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA 240  
 AATGTTCTAA CATGATACCT ACTTGTGAA GCTCATTTTT ATATTGATCA ATGACTAATT 300  
 GTTCATCTTT TGAAAAATGA AATGTTAACG GGATTAATAA ATCTTGTAAT TCATTGGTAA 360  
 15 CCTCACCTAT TTAATCTCGA AAATATTCAT ATnTTATnCT 400

## (2) INFORMATION FOR SEQ ID NO: 1530:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 97 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAA 60  
 30 GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA 97

## (2) INFORMATION FOR SEQ ID NO: 1531:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTCC AACTATATAC GATGTATCAA 60  
 45 CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA 120  
 TCTTCACGTA CTTTACGGCG AGATGATGAC 150

## (2) INFORMATION FOR SEQ ID NO: 1532:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACCAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60  
GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGCCTATCC TGAAGCCAAA 120  
GGAAATGAGA TCGGAATT 138

(2) INFORMATION FOR SEQ ID NO: 1533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

GGGGnCCnGG CAATGGAGGC GTGCTTGAT GGTGCTTGGA ATCATCCCTT TGGCCTCGAT 60  
CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120  
25 GTAATTnCT ATACCAACAT TTAAGGCATG TGGTAATGCT GGCTACTCCC GCTTCGTTAT 180  
CAGCTACATG ACAAATACAG ATGCCATCAC CTTTGCCTCC ATTTTAATCG TTGATGCTTG 240  
GAAATGTTTT TTGTAAATAT CAATGTTATC CTTCGCTGTA TGTATCGCAT TTATATCTGG 300  
30 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTCG GCAGCTATTT TGGCAGATGT 360  
TGCCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420  
ACTTGGTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

(2) INFORMATION FOR SEQ ID NO: 1534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

TACGCTAATA AATAGTTCAC TTTTCCATTT TGTGTAGTCA GTCATTGTA TTCTTCAATT 60  
TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAG TTGTCCAATA 120  
50 TACTCTAACT GGTCAATGATA AACAn 145

(2) INFORMATION FOR SEQ ID NO: 1535:

- (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

10 ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATT 60  
 CAAATTATTT CAAACTTTAC AATTnAACT AACAGTTTTTC TCAATAAAAT GCAAGCTTTT 120  
 CTCATTTGTT ATTTAGAATG ATTATGATTT A 151

## 15 (2) INFORMATION FOR SEQ ID NO: 1536:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 86 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## 25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

ATAATAGAAT CATTACAAAT TATTTAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT 60  
 AAAATGCAAG CTTTTCTCAT TGTTAA 86

## 30 (2) INFORMATION FOR SEQ ID NO: 1537:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

40 ACCAAACTGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC 60  
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTAATGATTG 120  
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAGCG AACAAGTCGA AAGTTATTTA 180  
 45 TAGAAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG 240  
 AGGGTACTGA TGGTTAAAAC AGTTTATGTA ACAGGTTACA AATCATTGCG ATTAAACATT 300  
 50 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAAAACAAT TTATAAAACA TAAAATTGAA 360  
 CAACTGTnGG ATGAAGGATT AGAATGGGnG TTAATACAAG 400

## (2) INFORMATION FOR SEQ ID NO: 1538:

55

- (A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

10 ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATn CTGACACCTC 60  
AATTTCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120  
CGCAAATCAC TCGTGC 136

15 (2) INFORMATION FOR SEQ ID NO: 1539:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

TAAATATCTC GGCACAATGA TGCGGGATAT TTTTTTACAA TAGGCATAAA GGCTGGAAAA 60  
AACATATCTA GTGCTATGAT ACTTA 85

30 (2) INFORMATION FOR SEQ ID NO: 1540:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

40 ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTGAAATC 60  
AGCTGAAGAC ACG 73

45 (2) INFORMATION FOR SEQ ID NO: 1541:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

55

TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

## (2) INFORMATION FOR SEQ ID NO: 1542:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 87 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA 60  
TGAGAGGAAT AGGGACAAGA TCATCAC 87

## (2) INFORMATION FOR SEQ ID NO: 1543:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTCTG AAAAATATTT AAATTGAAGA AAAGAATATT CTAACCTACGG AAGTGGTATT 60  
AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA 120  
ATAACTATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAAC TGAAGTAAAA AGCATAAGGA 180  
ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT 240  
TTAAACAAAA ATAAGTGTTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA 300  
AAGTCGTCAA ACGGCACTAA TATTTAnnAA ACAAATGTTT TAAGTTGTTG GATTInAAAA 360  
TATTGAATTA AAGTGTAAT TTGGACTATT GGAAATTGCG 400

## (2) INFORMATION FOR SEQ ID NO: 1544:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAAT 60

## (2) INFORMATION FOR SEQ ID NO: 1545:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAAATTAT AAACATGGTA AGCGTGTTTC 60  
 TCGTATTACT TTACTIONTAAAC nAACGGTATA ACCATACCTA ACTTAGTA 108

## (2) INFORMATION FOR SEQ ID NO: 1546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAATATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60  
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120  
 CGGTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180  
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240  
 TAGGTTTAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300  
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTTA GATAATCTTT 360  
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420  
 CACCATTCTA TATTTCTATT TtCACTGTac CATCATCCCC GCTATTGTGG aAGAAaTTGT 480  
 TTTtCGCGGT ATGATAATAA GGGkTATCTT CAGAAAACAC TTGTTTTTTAG GGTAAATTGT 540  
 GTCTAGTTTA GTTT 554

## (2) INFORMATION FOR SEQ ID NO: 1547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TAAAGCAACA CTTTAAATCC CTTTGAACCT TAGTTTATCC GCTAAATCAT AAGCTTCTTT 60  
 TTTGCTACTT ACAAAAATCA ATCCTTGTA AATTTACCT GAATATCCAT AGTAATCTGT 120  
 5 CTTTGAATA ATATAATTAA CTCTTTCATC AGAAGTTAAA TATCTCAGTT TAGTTACATC 180  
 ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240  
 10 AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTTATA TGCAATATTA TAATCAAACA 300  
 GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCAnG 360  
 AACTTAGGGT TTGGAGGTAG GTTAAATAC TCGGTTGGAT 400

(2) INFORMATION FOR SEQ ID NO: 1548:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

CGCTCTAGAA CTAGTGGATC CCCCgggCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60  
 TAGGACGGAG GGA 73

(2) INFORMATION FOR SEQ ID NO: 1549:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

GTATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60  
 ATGGCACCTC TTG 73

(2) INFORMATION FOR SEQ ID NO: 1550:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:



GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT 120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60  
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAAAGATTT TAGAATTTTA GAGGGTCAAG 120  
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180  
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60  
 TAGACAAACT AAAC TC 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCGTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAAC TATTG 60  
 TTATATAACT TGAGTTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120  
 CATCAACATG ATThA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10 TTTGAnATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60  
TAGTTGCCCC ACTAACGGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 100 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25 AATAAGAAAC AnGACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA AATGTTGGT 60  
GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 86 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40 CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60  
GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55 GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACAAATTAGG 60

## (2) INFORMATION FOR SEQ ID NO: 1558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCTTGTT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60  
TTTACCAGTC TTCTTCCCTT TA 82

## (2) INFORMATION FOR SEQ ID NO: 1559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60  
CATAAGTATA TGCAGTGA 78

## (2) INFORMATION FOR SEQ ID NO: 1560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60  
AATAAACGTT CAACAA 76

## (2) INFORMATION FOR SEQ ID NO: 1561:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCCA ATTCCCTTAA 60  
 GGGTTTTTCTT TGGGGGCCCG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120  
 5 ATTTTnGAAA AGTTTTAATT TAAGGAAACC CATThTCCG GAATTTTTTAC CCCATCCTTA 180  
 TGGGGGGTCC CAAAGATTCC 200

(2) INFORMATION FOR SEQ ID NO: 1562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

20 AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60  
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTCGTA 120  
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180  
 25 GAAAAAGATG AAGACTACTT CAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240  
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300  
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360  
 30 ATGGAATTGT TGGnCAGTCA TGGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

45 TCTTCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60  
 CGATACTGTT TCACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120  
 CCATTATGAT AACTAATTC TCTTGTTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180  
 50 ATTTCTACAT CTACAATTTT GCCATTATAA ATAAGTGTTC GATCAATTGT TTTTTCATTT 240  
 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300  
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAAA TATATTAAAA AGTGGTATTT 360

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

(2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCACGAC TTGCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC 60  
AACATCTGC 69

(2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAANGTAA TATATCCAAG 60  
CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG 117

(2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT 60  
ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT 103

(2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 81 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCAATTTGT CGGCAACTGG 60  
 5 TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 80 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTC 60  
 20 ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 95 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

TTTTTAAATA CGATTTTAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60  
 35 TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60  
 50 TGTAATATAA ATATTTTATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTACTAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10 GTCATTTATT TGTACTAATT CAAAAACAT TGTTGTTTTTC CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAAGTGA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25 TTGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

40 TCCAGTTGCT TATT 74

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTTAACAAAC TTTTATTAAT 60

55 GTTTTTGGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

GTAATTAATG TAATAATAGA AAAGTGTATA TATCTCATAT CGCCACCTGC TATACAACTT 240  
 ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300  
 5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

## (2) INFORMATION FOR SEQ ID NO: 1575:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATAnGTGTCA TAGGGTGACT CAGCATAACG 60  
 20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

## (2) INFORMATION FOR SEQ ID NO: 1576:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 79 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

30 GCTAGATTGC GGGAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60  
 TAATAAAAAA TTGATGAGA 79

## (2) INFORMATION FOR SEQ ID NO: 1577:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

45 ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTTGAAA TGATCGTGTA 60  
 ACTTTTCAT 69

## (2) INFORMATION FOR SEQ ID NO: 1578:

## (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 104 base pairs